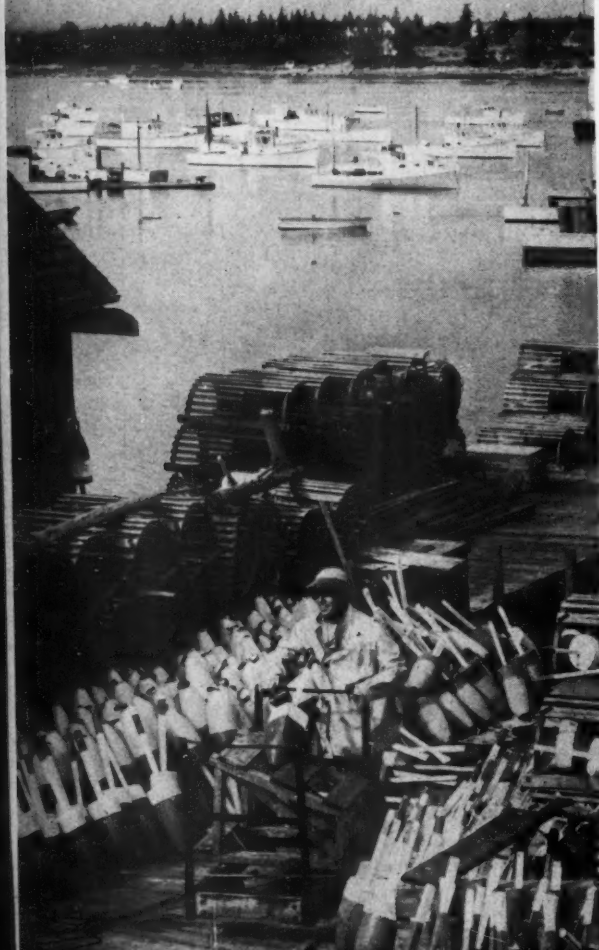


NATIONAL FISHERMAN

MARCH
1957

MANY MORE YEARS OF SERVICE



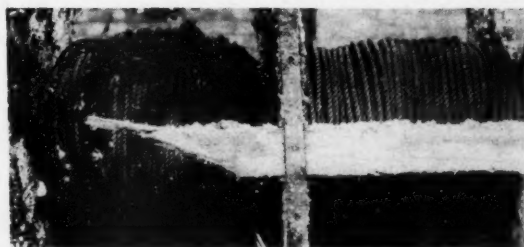
COLUMBIAN ROPE COMPANY
Auburn "The Cordage City", N. Y.

Because Columbian Copperizing Resists Marine Growth

When rope is constantly in salt water, it needs the anti-fouling protection that Columbian Copperizing gives it. Tests under actual fishing conditions prove that Columbian Copperized Rope has no equal in resistance to marine growths. Fishermen everywhere have made the familiar sea-green Columbian Copperizing Rope their favorite because they know it gives better service over a longer life.

This rope has also the Columbian Fungi-Static treatment—an anti-rot process which prevents the growth of fungi, mildew and mold. With these two Columbian processes—Copperizing and Fungi-Static—combining against rope-decay, it's no wonder that Columbian Manila is the longest-lasting rope you ever used. Columbian Rope is also non-kinking, abrasion resistant, lubricated against internal heat and friction. It is made from only the finest Manila fibres, graded at Columbian's own Philippine Islands bodegas. Remains flexible after repeated soakings. And backed by 50 years experience in every kind of rope making from hawser to twine. There's a Columbian supplier nearby—or write to the Columbian Rope Co., Auburn, N. Y.

Columbian pioneered the manufacture of rope and twine of Nylon, Dacron, Polyethylene and other synthetics. Columbian sets the standard in these products.



Tests of coils submerged in the sea over a period of months show the effectiveness of Columbian Copperizing treatment against marine growth. Such special treatments are applied in addition to Columbian Fungi-Static.





Your Wickwire Rope Distributor and our sales engineer ... a helpful team



This sales engineer—an expert on the selection, installation and maintenance of our products—is with your Wickwire Rope Distributor every time he makes a call.

True, sometimes he's hundreds of miles away, working in the field or at the mill. Yet, even if he's not there in person, your Wickwire Distributor has the full assurance that sales engineers such as this one are *always* quickly available to help you.

It's just one more reason why your Wickwire Distributor knows he's got top-quality wire rope, slings and strand to sell... and that these products will serve you well.

A PRODUCT OF THE COLORADO FUEL AND IRON CORPORATION

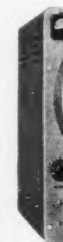
4086

FISH
RCA F
gest sch
indicat
other
appear
face of
availab
ing app



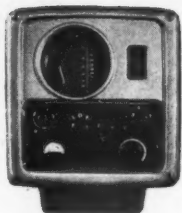
LORAN
RCA D
you to
fuel-sav
range 1
you can
position
time da
shore b

Mo
AR-87



RCA D
to take
beacons
fog and
loop des
stallatio

MARCH,



Model
LAZ-16

FISHFINDERS FOR PROFITS!

RCA Fishfinders pinpoint the biggest schools... give accurate echo-indications of the sea-bed, fish and other underwater objects. Echo appears as easily read display on face of cathode-ray tube. Models available for many different fishing applications.

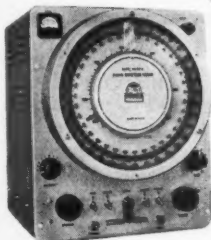


Model LR-8803

LORAN FOR QUICKER PASSAGES!

RCA Direct-Reading Loran gets you to destinations via the faster, fuel-saving route utilizing long range radio navigation. With it you can accurately determine ship's position at sea in any weather, any time day or night when in range of shore based loran stations.

Model
AR-8714



(RM-281
Loop)

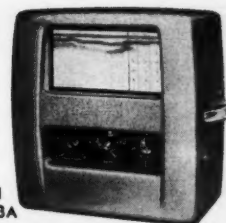
DIRECTION FINDERS FOR ACCURACY!

RCA Direction Finders enable you to take accurate bearings on radio beacons. Help you navigate through fog and darkness. New small fixed loop designed for space saving installation. Versatile operation.

faster, safer, more profitable *Fishing Operations* with **RCA marine equipment!**

With RCA marine electronic equipment aboard, your fishing operations move faster, more efficiently, with less chance of loss to valuable hauls and equipment. You get quicker passages to and from fishing grounds, faster indication of the profitable catches, protection of fishing gear, dependable and accurate navigation, flexible ship-to-shore and ship-to-ship contact—safety at sea! Choose RCA for the most reliable equipment in marine electronics.

Write for free information now!



Model
LAZ-13A

ECHOGRAPHS FOR PROTECTION!

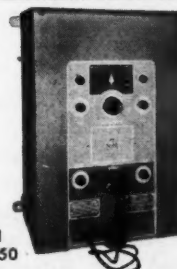
RCA Echographs are designed to give a graphic interpretation of rocks, wrecks, other underwater hazards beneath vessel... helps avoid costly damage to nets and lost catches. Invaluable for shallow water navigation!



Model
CR-105

RADARS FOR CONFIDENT NAVIGATION!

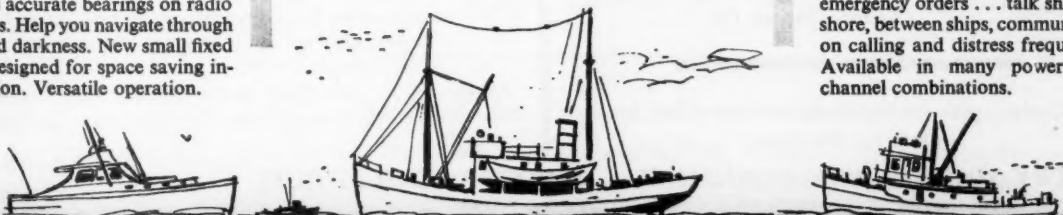
RCA Radars are ideally suited for close-in or open sea navigating. Easy to use, easy to read and interpret. Available in ranges from 1 to 32 miles. Compact design and economical operation solves space, power and cost problems aboard small craft and fishing boats.



Model
ET-8050

RADIOTELEPHONES FOR DEPENDABLE COMMUNICATION!

With RCA Radiotelephones you can schedule, reschedule, issue emergency orders... talk ship-to-shore, between ships, communicate on calling and distress frequency. Available in many power and channel combinations.



Radiomarine

RADIO CORPORATION OF AMERICA

Radiomarine Products • 75 Varick Street, New York 13, N. Y.

Trademark

"We've Found The Battery We've Been Looking For..

The *Surrette* LANASA SHRIMP CO.

Key West, Florida
Joseph C. Hemberger, Manager



Mr. Joseph C. Hemberger, Manager of the Lanasa Shrimp Company of Key West, Florida tells why he's switching to Surrette:

"We have been looking for a marine battery suited to our operations for a long time. During the past several years we have tried many makes of batteries in our fleet of 14 Trawlers. For what it is worth, I'd like to mention some of the things we have learned about battery trouble, and we have had plenty of it. We've learned that a simple thing like a battery can cause all kinds of trouble on a ship. If the battery isn't right, it causes generator trouble. It also causes radio trouble. If the battery doesn't have the correct flow of voltage at all times, you can expect this type of trouble. For our money, the battery is one of the most important pieces of equipment on a fishing vessel.

"From our experience, we have finally found the battery that suits our needs — the SURRETTE MARINE BATTERY . . . World's Best!"

"For the size of the battery and its power output, Surrette is the best. It stands up under long runs. When we have Surrettes on a boat, we have a minimum of radio and generator trouble. We have tested Surrettes and now use them on four of our boats. The batteries on our other 10 boats will be replaced with Surrettes also. We have at last found the battery we have been looking for—the SURRETTE MARINE BATTERY."

Signed: Joseph C. Hemberger, Manager
Lanasa Shrimp Co.

Contact your nearest dealer or write direct to plant for literature.

SPECIFY SURRETTE WITH CONFIDENCE . . . ACCEPT NO SUBSTITUTE.

Use Oversize Batteries Where Possible for Best Service

It is no accident that leaders in the marine field show a tremendous preference for SURRETTES.

1. Surrette batteries are designed to outwork and outwear all others when proper size is selected.
2. Rezistox Plates used exclusively in SURRETTES add extra dependability and longer life.
3. Surrettes are especially designed for MARINE DUTY, not auto construction converted to a marine case.
4. SURRETTE BATTERIES make other brands expensive by comparison when the extra dependability and longer life are taken into consideration.

Many have imitated their appearance — but none have duplicated their record of trouble-free, long life.



Surrette MARINE BATTERIES
JEFFERSON AVENUE SALEM, MASSACHUSETTS

In this issue

Fishery Research Funds Increased by \$3½ Million	13
Fish Ladder Tests on Columbia River	14
How to Land Top Quality Groundfish	15
Two New Draggers Join Atlantic City Fleet	17
84-Foot "Stanley M. Fisher" Is Outstanding Scallop	20
Pacific Albacore Influenced by Water Temperatures	34
Tagged Yellowfin Tuna Reveals Vertical Migration	47

NEWS REPORTS

Alabama	26
Boston	42
California	33
Connecticut	34
Florida	38
Georgia	26
Gloucester	36
Great Lakes	18
Long Island	34
Louisiana	23
Maine	25
Maryland	22
Massachusetts	36, 42, 50
Michigan	18
Mississippi	47
New Bedford	50
New Jersey	26
North Carolina	23
Ohio	18
Oregon	32
Pacific Coast	31-33
Rhode Island	48
South Carolina	39
Texas	19
Virginia	24
Washington	31
Wisconsin	18

REGULAR DEPARTMENTS

Fishery Progress	9
Equipment and Supply News	40
Boat Catches for February	44
Where-to-Buy Directory	52
Foreign Bailings	53
Classified Advertising	54

Yearly subscription rates: United States, \$4; Foreign, \$6. Single copies, 50¢.

Accepted as Controlled Circulation Publication at Manchester, N. H.

NATIONAL FISHERMAN

The Fishing Industry Magazine

Better Handling Would Up-Grade Catch Quality

Plans are being advanced for quality improvement through better handling of fish aboard boats. A program to set up voluntary rules and procedures has been formulated by National Fisheries Institute under contract with the Fish & Wildlife Service.

While aimed at the nation as a whole, the initial phase of the program is expected to go into effect in New England. A new set of sanitation regulations for the Massachusetts fishing vessels was outlined at a meeting of the New England Fisheries Technologists last month in Boston.

Several studies have been made to determine the factors affecting the quality of fish on boats. One of the main causes of fish spoilage is known to be mechanical damage, which includes bruising or crushing of fish by careless handling or stowing. The use of pitchforks has long been decried as detrimental in unloading fish, and it is interesting to note that Norway has a stringently enforced law that states forks may be used only in the heads of fish.

The suggested procedures in handling of catches to insure quality improvement would require that fish be gutted thoroughly and fish over two pounds be gilled Winter and Summer, that gutted fish be washed and washing box water be changed frequently, that fish be put down and out of weather as quickly as possible, and fish coming out of hold be sorted with care to reduce number of culls.

Recommendations on icing call for

the ice bed in pens to be at least six inches thick, jagged edges in crushed ice to be pounded out, that at least three inches of space be left between fish, pen boards and hull, that layers of ice be arranged so all fish get benefit of ice, and that shelving be used to relieve pressure from weight of fish.

On the matter of improved sanitation aboard boats, the proposed rules state that the hold must be dried out and painted at least once a year, that the hold be washed completely and sprinkled with salt or similar agent after discharge of each trip, that pen boards be scrubbed after they come out, be kept painted and replaced when worn, that working tools which come in contact with fish be kept clean and free of rust, that culls be quickly discharged and placed in iced container on dock, and that facilities for personal cleanliness be used.

The rules and standard procedures being promulgated for improving quality of landed fish should receive the careful consideration of all fishermen. While present plans call for their use on a voluntary basis, it would be beneficial to the industry if they became accepted practices.

To a large extent, some of the present methods of handling fish are used because they are considered to be quickest and least expensive. Fishermen and boat owners should realize that the reduction in loss of fish and up-grading of quality would far more than compensate for the increase in labor and equipment necessary for proper handling.

Publication Office: National Fisherman, Goffstown, N. H.—Hyacinth 7-4821

Formerly Atlantic Fisherman, Established 1919. Published monthly by Atlantic Fisherman, Inc.

P. G. LAMSON
President

GARDNER LAMSON
Publisher and Editor

A. E. BROWN
Managing Editor



Member: National Business Publications and
Business Publications Audit of Circulation



Pacific Representative: Murray Bothwell, 234 E. Colorado St., Pasadena 1, Cal.—Ryan 1-9155

Southern Representative: William C. Walters, P. O. Box 619, Atlanta 1, Georgia—Drake 8-0003

B.F. Goodrich



3200 Spongex floats do the work of 7000 conventional floats on this 9 ton net

3000 Spongex Floats celebrate their 5th birthday

After 5 seasons' experience with over 3000 Spongex® seine floats, Capt. C. H. Clark, fishing supervisor for Nelson Bros. Fisheries, Vancouver, B. C. and captain of their 122 ton flagship "Western Producer", says,

"I'm convinced Spongex floats are a major improvement over what we've had in the past. The floats on my net have been in service for five seasons and they look practically new. With conventional floats, I'd have started on the third set by now. Furthermore, corks absorb water, lose buoyancy—take valuable time to dry out. This doesn't happen with Spongex floats—they absorb virtually no water at all.

"Another real advantage is a 1500 lb. reduction in total weight. This means lighter work for the crew and with the net carried on the stern a difference of about 5 tons in capacity of any bulk fish."



As fishing supervisor, Capt. Clark says, "Ultimately the entire fleet will be equipped with Spongex floats."



Since the oval floats have been in service, B. F. Goodrich has developed a cylindrical shaped float in 12 sizes from 3" x 1½" to 6" x 7½". Generally, these floats are believed to be even better than the original ones.

For more information write B. F. Goodrich Sponge Products, a division of The B. F. Goodrich Company, 392 Derby Place, Shelton, Connecticut.

Made under Pat. No. 2,737,503

B.F. Goodrich

SPONGE PRODUCTS

NATIONAL FISHERMAN - MARCH, 1957

This Trademark

**backed by over 100 years
of serving the fishing
industry...**

**means you've got the
very finest nylon twines and
maitre cords for fishing operations.**

Brownell Nylon Seine Twines, Maitre Cords and Ropes are made especially for you from high tenacity 100% DuPont Nylon yarns. But quality yarns is just the *beginning* of the *Brownell Story*. For more efficient performance, all our Nylons are engineered for the specific purposes they are to be used for. Our rigid factory specifications on all our Nylons call for the *exact twist counts* to assure you the maximum strength plus the maximum yardage. And all our Nylons are processed to prevent excessive untwisting.

For your convenience we package Brownie Seine Twines in 1/4, 1/2, 1, or 2 pound tubes.

You'll find the Brownie Trademark on the largest selection of Nylons for the Fishing Industry. Here are just a few:

Regular Nylon Seine Twine
Stretched and Bonded Nylon
Maitre Cord

Lobster Pot Nylon Heading
Twine (both Regular and
Bonded)

Combination Nylon Seine
Twine (Spun and Filament)

Brownie Type "E" Nylon
...the only successful
trawl or long line available
today.

Spun Nylon Seine Twine
Plus a complete selection of
Nylon Hanging or Seaming
Twines



For your netting, specify
BROWNELL—the largest and the
quality manufacturer of Nylon Seine Twine
and Maitre Cords . . . Make sure
your netting manufacturer is
using Brownell Products!

Included among Distributors of Brownell Products are—

HOWARD K. BALCH COMPANY
1653 North Farwell Avenue
Milwaukee 2, Wisconsin

CONSOLIDATED NET & TWINE COMPANY
Fishermen's Terminal
Seattle 99, Washington

MIDWEST NET AND TWINE COMPANY
404 Logan Avenue
Winnipeg 2, Manitoba, Canada

ONTARIO FISHERMEN'S CO-OPERATIVE
Port Dover, Ontario, Canada

F. C. ROBBINS (IMPORT)
4 Alma Street
Yarmouth, Nova Scotia, Canada

UNDINE INTERNATIONAL COMPANY
Moodus, Connecticut

WESTERN MARINE SUPPLY CO., LTD.
558 Powell Street
Vancouver, B.C., Canada

Plus Many Others . . .

**For additional information on Brownie Products and
the name of your nearest distributor, write to—**

BROWNELL & CO., INC.
MOODUS, CONNECTICUT

NEW TEAMWORK IN DIESEL ENGINE DESIGN AND PRODUCTION

Last year American MARC Inc. purchased the Diesel Division of Hallett Manufacturing Company, national leader in development and production of low-horsepower Diesel engines (especially in the air-cooled field).

The goal of this combination of two great firms was to make better lightweight Diesels for less money—an end that has already been accomplished after only a few short months!

Today the position of the American MARC-Hallett team is stronger than ever. Foreign competition in both quality and price is now met successfully by American MARC's modern mass-production techniques in the manufacture of rugged, reliable, truly All-American Diesel engines.

Scores of improvements have made standard Hallett models into revolutionary new engines. This is true particularly in the case of the air-cooled 6 HP AC1, midsize prime mover adaptable to almost any application—from generators to trackless ore cars.

If you need a husky small Diesel for industrial or marine use where extra lugging power is desired, write today to American MARC for free literature and specifications on these fine engines, with their small size, low cost, and modern refinements.

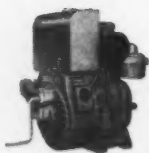
AMERICAN MARC INC. ENGINES OF QUALITY

1601 West Florence Ave., Box 549, Inglewood, Calif. • Telephone OR.8-7174

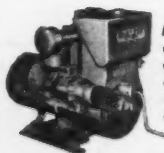
SOME desirable sales territories are still open.
Inquiries are invited from representative dealers.

- ★ Air or Water Cooled; 5.5 to 25 hp
- ★ All-American, from basic materials to completed engines
- ★ Available as portable power units, generating plants, pumping units, or for marine propulsion

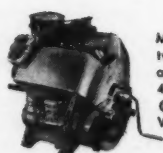
6-101



Model WC-1,
one-cylinder,
water-cooled,
4-cycle, 6 HP
@ 1800 RPM.
Wt.: 220 lbs.



Model A1Q-3KW,
one-cylinder,
air-cooled,
4-cycle, 3KW
@ 1800 RPM.
6-7 HP



Model AC-2,
two-cylinder,
air-cooled,
4-cycle, 14 HP
@ 1800 RPM.
Wt.: 350 lbs.



Model AC-1,
one-cylinder,
air-cooled,
4-cycle, 6 HP
@ 1800 RPM.
Wt.: 220 lbs.

► Fis

This
330, h
loan
Of th
Engle
Coast
from
Lakes

The
\$250,
repair
ing o
est is
will r
ment.

Fish
15 lo
gear
pense
firms
On M
man

In
comp
and

Loa
appli
totali
ingto

In
\$5,50
conce
pairs
nanci

Ala
for v
gear,

► As

At
budge
Lynd
Spess
ed \$
Coast
tect t
Mexi
Treas
"hesi
prom
and
mitte
priat

On
resen
State
State
shrim
area.
Coast
ing a

► Su

No
be C
life v
ary
Assis
Servi

► Fis

Se
trodu
struc
and

MARC

► Fisheries Loans Approved

Thirty-five loans, totaling \$1,196,330, had been approved under fishery loan fund program up to February 4. Of the 35 loans, 18 were from New England area; seven from Pacific Coast, one from Chesapeake, one from Gulf of Mexico, one from Great Lakes, and seven from Alaska.

The largest loan to date is for \$250,000 to a Mississippi company for repairs, modernization and refinancing of menhaden vessels. The smallest is to an Alaska fisherman, who will receive \$1,500 for vessel replacement.

Fishermen of Gloucester, Mass. had 15 loans approved for refinancing, gear replacement, operating expenses and vessel repairs, and two firms in Boston had loans authorized. On Newport, Rhode Island, fisherman will receive a loan.

In the Chesapeake area, a Virginia company will get \$8,800 for vessel and gear replacement.

Loans approved for Pacific Coast applicants include six in California, totaling \$309,750; and one in Washington, for \$8,873.

In the Great Lakes area, a loan of \$5,500 was approved for a Michigan concern, to be used for vessel repairs, gear replacement and refinancing.

Alaska loans, totaling \$20,800, are for vessel repairs, replacement of gear, and, in one case, for refinancing.

► Ask More Shrimp Patrol Boats

At hearings on Treasury-Post Office budgets on February 28, Senators Lyndon B. Johnson of Texas and Spessard Holland of Florida requested \$1.8 million to reactivate three Coast Guard mine sweepers to protect United States shrimp boats near Mexican waters. Secretary of the Treasury Humphrey said he would "hesitate" to ask for the money, but promised to investigate the matter and relate his findings to the committee before it reported the appropriations bill.

On February 25, a delegation representing shrimp interests of Gulf States met with Under Secretary of State Christian A. Herter to discuss shrimp boat seizure problem in Gulf area. Desire and need for increased Coast Guard patrol of Gulf shrimp-ing area was outlined.

► Suomela, New Commissioner

Nomination of Arnie J. Suomela to be Commissioner of Fish and Wildlife was sent to the Senate on February 18. Mr. Suomela formerly was Assistant Director of Fish & Wildlife Service.

► Fisheries Legislation

Senators Butler and Byrd have introduced a bill to authorize the construction of a shellfish laboratory and experiment station in Chesapeake Bay area.

The legislation has been referred to Committee on Interstate and Foreign Commerce.

Congressman Pelly recently introduced in the House a bill to extend to fishermen the same treatment accorded farmers in relation to estimated income tax. This legislation is similar to a bill filed by Congressman King.

A bill introduced in the House by Congressman Cooley provides for aid in establishing public marketing facilities for wholesale handling of perishable agricultural commodities and seafood, in order to promote orderly and efficient distribution, increased consumption, and a reduction in the spread between prices paid by consumers and those received by producers. Loans to States, public agencies, municipalities, public corporations, and private enterprise, or a combination of these, could be made up to 85 percent of total cost of market facility.

► Canned Fish Pack

Increases in packs of tuna, Alaska salmon, Maine sardines and Pacific Coast mackerel were largely responsible for 10 percent gain in 1956 production of fish canned for human food. Fish and Wildlife Service records show that in 1956 there were 650,000,000 pounds of fishery products packed for human use, compared with 588,000,000 pounds in 1955.

Tuna pack of 227 million pounds set new record, beating 1955 pack by 31 million pounds. Alaska salmon pack was 144 million pounds, 30 million pounds higher than in 1955, but Puget Sound salmon fisheries produced 20 million pounds less than in year previous. Puget Sound pack was 23 million pounds.

A larger run of red salmon in western and central Alaska and a better-than-usual run of chum salmon in central and southeastern Alaska were responsible for gains made in Alaska fisheries. Puget Sound area experienced its usual "even-year absence" of pink salmon which, because of their two-year cycle, historically have large runs on odd-numbered years and almost no fish on even ones.

Pacific Coast firms engaged in canning Pacific and jack mackerel produced 50 million pounds in 1956, twice the 1955 mark. Cannerymen turned to mackerel due to the fact that West Coast sardines were scarce. Pacific sardine pack of 32 million pounds was just half what it was in 1955. Maine sardine cannery had a much better year in 1956, canning 45 million pounds, an increase of 19 million over 1955.

South Atlantic and Gulf oyster

cannerymen packed 4.3 million pounds, which was considerably below the 1955 mark of 5.3 million pounds. Shrimp cannerymen, with 13.8 million pounds in 1956, were slightly ahead of previous year.

A new record was set in production of fish meal, the 296,000 tons in 1956 exceeding the 264,000 tons produced in 1955, which in turn had broken all previous marks. There were 26,500,000 gallons of fish oil produced, seven percent more than in 1955 but considerably below 1936 output of 39,900,000 gallons.

► Tariff Rate Quota on Tuna

The Bureau of the Customs gave notice recently that 45,460,000 pounds of tuna may be entered for consumption or withdrawn from warehouse for consumption during calendar year 1957 at tariff rate of 12½ percent ad valorem under paragraph 718 (b), Tariff Act of 1930, as modified. Tuna imported in excess of this quota will be dutiable at full rate of 25 percent ad valorem.

► Fish Cookery Demonstrations

The Fish and Wildlife Service has arranged for 91 fish cookery demonstrations for first half of 1957. School lunch demonstrations thus far scheduled are as follows: Mississippi, 32; Georgia, 12; Texas, nine; Maine, eight; Virginia, four; New York, three; Maryland, two; and one each for Tennessee and Massachusetts. Special demonstrations for institutional and extension personnel will be given in Colorado, Idaho, Indiana, Maryland, Michigan, Oregon, Washington and Alaska.

► Cold Storage Holdings Higher

Cold storage holdings of edible fishery products on February 1 were about 4 million pounds greater than a year earlier. Higher holdings were mostly in cod, haddock, and ocean perch fillets; halibut, salmon, spiny lobsters, and Dungeness crabs. Lower holdings were in flounders and sole, fish sticks, whiting, and shrimp.

► Hydraulic Trawl Winch

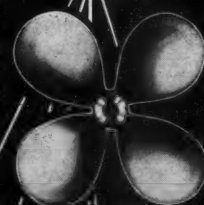
An hydraulic trawl winch for use in Diesel trawlers has been developed by a British firm. The hydraulic drive has similar characteristics to a steam-driven trawl winch and is able to stall for long periods without detriment to either hydraulic drive or mechanical portion of winch.

Combined with this specially designed trawl winch is the firm's hydraulic transmission. An hydraulic variable speed gear, consisting of two units, an hydraulic pump and an hydraulic motor, is used to transmit power of the Diesel engine to the trawl winch and to regulate its speed and pull.

The Greatest Propeller Values by a **WIDE MARGIN!**

If you intend to buy an inboard propeller and you want to be sure of getting the best possible buy, see your Michigan dealer or write for your free copy of our Inboard Catalog, then compare these wheels with any the market offers on every point that determines VALUE. You'll find that usually it actually costs considerably LESS to own the BEST, — a MICHIGAN wheel!

"WORKHORSE" — Provides the proper blade area when cramped propeller space does not allow use of large enough 3-blade wheel.



COMPARE DESIGN and WORKMANSHIP

There's a Michigan wheel to give you exactly what you want . . . greater speed, riddance of vibration, maximum thrust or just all around better performance. Designs that are based on more than a half century of propeller-building experience, with the finest workmanship evident in every detail of construction.

COMPARE METALS

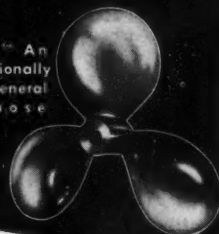
In point of service, as you can learn from Michigan wheel users, Michigan's "MICHALLOY-K" often lasts as much as three times as long as ordinary bronze, and its premium alloy "MICHALLOY XX" is stronger than stainless steel for more resistant to corrosion . . . as proved in hundreds of installations operating in the Gulf of Mexico.



"A-M" Especially good for shallow and weed infested waters.

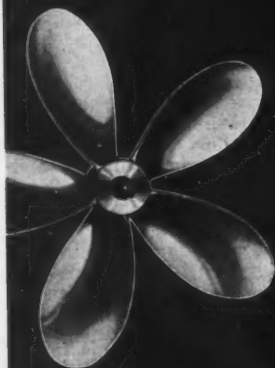
and when you are
fully convinced that
MICHIGAN wheels are the
finest money can buy . . .

"M-P" An exceptionally fine general purpose wheel.



COMPARE PRICES!!!

In spite of labor and material increases, Michigan has been and is doing a remarkable job in holding the line against price increases. You'll find that Michigan wheels frequently can be bought for as much as 10% to 25% less than competitive wheels. To get the most for your propeller dollars, by all means see your Michigan dealer.

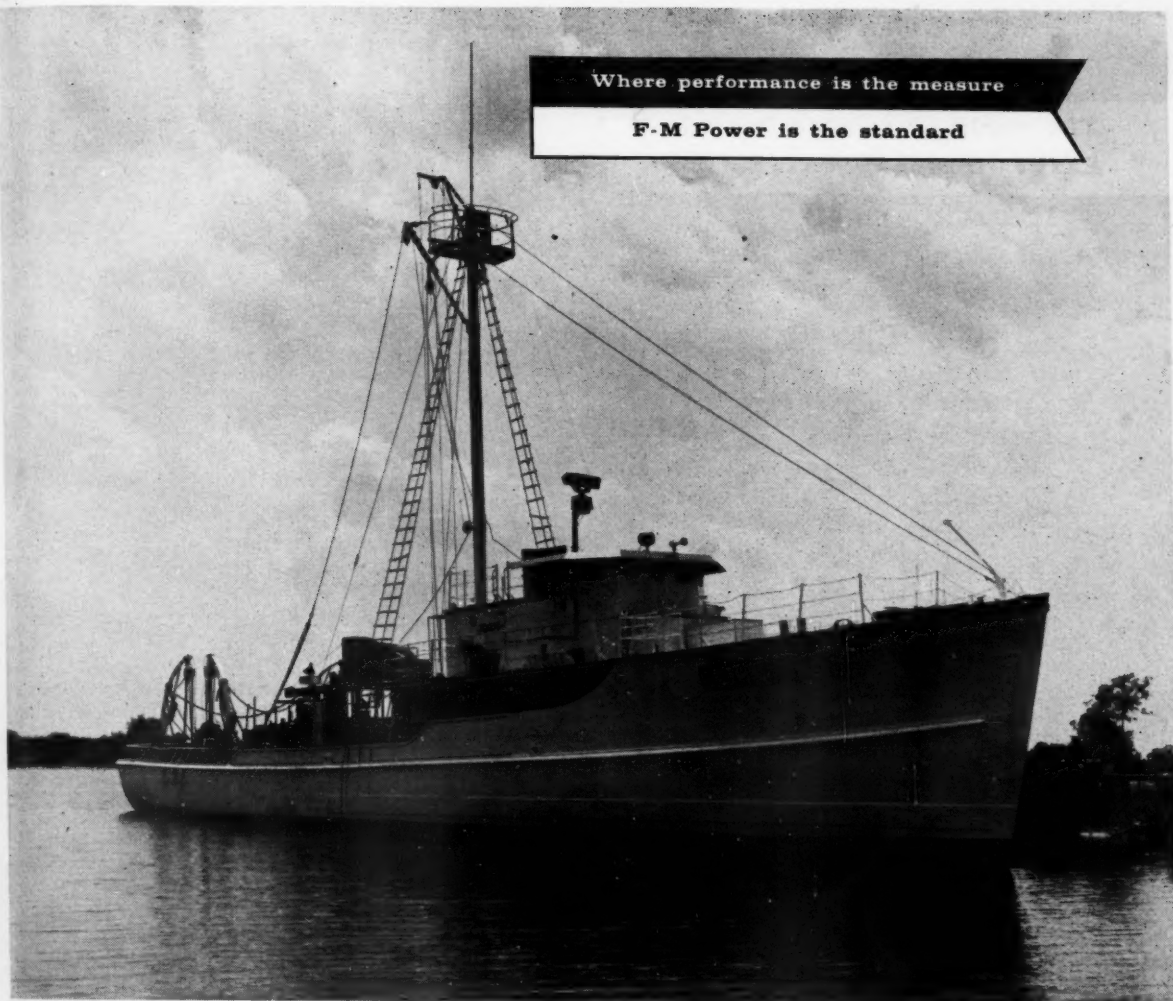


"STAR" — Eliminates stern vibration. Provides more speed at ideal cruising rpm.

MICHIGAN WHEEL COMPANY
GRAND RAPIDS 3, MICHIGAN

Where performance is the measure

F-M Power is the standard



Pair of O-P's for the John "O"

The twin-screw Menhaden fishing vessel *John O* is to be repowered with 1200 Opposed-Piston horsepower. By replacing the original pair of 500 hp. engines, these 8-cylinder Model 38F O-P's:

Increase power 20% . . . reduce weight 30%
Increase speed and improve maneuverability

In all waters more and more repowering jobs are going to packaged O-P engines that are easier and quicker to install . . . economical in fuel and lube oil consumption . . . operate with minimum vibration . . . low in maintenance cost . . . easily and quickly serviced.

See what this performance and economy can mean to you in repowering your vessel. See your nearby F-M Marine Specialist and find out the full meaning of "More Power to You with O-P." Fairbanks, Morse & Co., Dept. NAF-3, Chicago 5, Ill.



FAIRBANKS-MORSE

a name worth remembering when you want the BEST

DIESEL AND DUAL FUEL ENGINES • DIESEL LOCOMOTIVES • RAIL CARS • ELECTRICAL MACHINERY • PUMPS • SCALES • HOME WATER SERVICE EQUIPMENT • MOWERS • MAGNETOS



Capt. John Lowry (right) of Haylow Fisheries accepting delivery of two 600 hp. O-P's to go into the Menhaden vessel *John O*.

**The world of science behind
EXIDE-IRONCLAD BATTERIES**



Being interviewed is W. W. Smith, Divisional Manager, Product Engineering. Grids in back are of Exide's exclusive Silvium. Those in front are ordinary alloys.

"All of these alloys had the same acid test"

*At the Exide Laboratories—***Reporter:** Was it a typical charge-discharge test normally used to test battery components?

Smith: Right. And the two positive plate grids with no visible signs of corrosion are Exide's patented Silvium alloy.

Reporter: How about the others—what alloys are they?

Smith: They're standard alloys used in other well-known makes of batteries. But they don't have Silvium's corrosion-resisting ingredients.

Reporter: Where is Silvium used?

Smith: In the positive plates of all Exide-Ironclad and many other Exide Batteries.

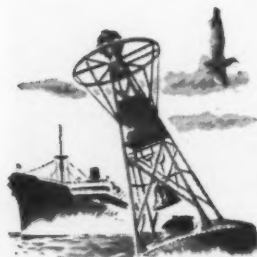
Reporter: How does it affect battery performance?

Smith: Every test we've made proves it stretches battery life because the grid resists corrosion—sometimes up to 100% longer.

Reporter: Obviously this is an important feature of the Exide-Ironclad.

Smith: Yes it is, but it's just one of many engineering details that contribute to its high capacity and long life.

Note to battery users: Whenever you order heavy duty batteries or the equipment that requires them, be sure to specify Exide-Ironclad. For detailed bulletin, write Exide Industrial Division, The Electric Storage Battery Co., Philadelphia 2, Pa.



THE ELECTRIC STORAGE BATTERY COMPANY

Exide®

NATIONAL FISHERMAN - MARCH, 1957

Fishery Research Funds Increased by \$3½ Million

Removal of ceiling on Saltonstall-Kennedy allocation

permits big expansion of fish investigations at sea

AN additional \$3,595,000 in Saltonstall-Kennedy funds has been allotted for market, technological and biological fisheries research and for exploration and development of the commercial fisheries in the fiscal year ending June 30, 1957. With the \$3,000,000 already allotted for this work, the total Saltonstall-Kennedy funds for the fiscal year 1957 amount to \$6,595,000. The additional money will help the Bureau of Commercial Fisheries begin work on the backlog of fishery problems which have been calling for attention for some years.

Congress last year extended the Saltonstall-Kennedy Act on a permanent basis, and made available the full 30 percent of duties on imported fishery products, thereby removing the former \$3,000,000 annual limitation. However, the Saltonstall-Kennedy funds are larger this year than normal, because Congress also voted to allow the use of some accrued receipts. In the future the amount of money available through Saltonstall-Kennedy sources will be approximately \$4,500,000 per year.

Sizable Sums for Tuna and Salmon Studies

Allocation of the additional funds available includes an allotment of \$630,000 to finance a three-year research program on Pacific Coast tuna. This work will include research of hydrographic fronts, food prevalence under varying oceanic conditions, tuna and tuna bait fish behavior, and numerous other items which will help technicians understand and forecast tuna abundance.

Coastal and offshore biological research was granted an additional \$1,009,500, making \$2,073,200 available for that purpose. Alaska salmon research will get \$389,600 of this money, for a total of \$572,600. Projects include development of methods for more accurately predicting salmon runs and measuring escapement, studies of migration patterns of red and pink salmon and causes of pink salmon mortality during the fresh water phase of its life history. In addition, nearly \$84,000 of the new money was earmarked for Pacific herring studies in Alaska, while \$130,000 was allocated to study Alaska's king crab.

Because more biological data is needed on sea scallops, flounders, whiting and ocean perch, \$145,000 was added to the \$294,000 designated for the North Atlantic trawl fishery. North Pacific ocean fisheries got \$90,000; menhaden research got \$121,000, principally for work in the Gulf of Mexico; Atlantic striped bass work got \$20,000 added to \$32,000; and \$30,000 was added to the Gulf of Mexico expenditures for improvement of research facilities.

Oyster problems got the bulk of the extra shellfish research money—\$108,000. Under the previous allocation, the New England, Gulf and Middle Atlantic oyster fisheries each had \$25,000 for research matters. A sum of \$75,000 has been allocated for new blue crab research.

Inland commercial fisheries, principally the Great Lakes, which had no Saltonstall-Kennedy research funds originally, received \$195,000 of the new funds.

More Money for Exploratory Fishing

Of the \$1,395,500 added to commercial fishery studies, exploratory fishing and gear research got \$453,300; technological studies, \$386,700; fishery statistics, \$50,500; economic studies, \$104,000; market development and education, \$300,000; and market news, \$101,000.

The added exploratory fishing and gear research funds will permit the Fish and Wildlife Service to expedite and expand its survey of resources available to commercial vessels. More adequate information will be sought on the extent and character of potential fishery resources and the best means of harvesting them.

The new money will permit more extensive exploration

work in the North Atlantic for trawl fish and scallops, shrimp in the South Atlantic, bottom or midwater varieties in the North Pacific, as well as more thorough exploration for shrimp and other potentialities in the Gulf and Caribbean. The total amount available for exploration and gear research is \$757,300.

Quality Improvement Work to be Expanded

Research in fishery technology has been along two major lines. One is to devise ways and means of retaining fish freshness for a longer period, to give inland consumers an opportunity to enjoy "ocean fresh" fish products. The other is to devise new uses for industrial products, such as fish meal and fish oil.

To the \$459,000 originally set aside for research in fishery technology, \$386,700 has been added to make a total of \$845,700. Nearly \$80,000 of the new funds have been allocated to the new laboratory under construction in Mississippi for work on Gulf technological problems. This is in addition to \$40,000 now available for Gulf oyster processing and transporting problems.

About \$50,000 has been added to the \$127,000 designated for development of standards for prepared fishery products, and \$100,000 has been allotted for developing improvements in blue crab processing techniques to meet new standards.

Eighty thousand dollars has been provided for radiation preservation research on fishery products as part of the President's Atoms for Peace programs; \$50,000 for extending tuna quality studies to the processing stages; and smaller amounts for development of a chemical index for fish meal and for new uses for fish oil and meal.

Economic studies, especially on fish consumption, have been allotted \$242,000 under the revised plan, of which \$104,000 represents added funds. For the promotion of the use of domestic fishery products by marketing studies and educational means, \$300,000 was added to the original \$317,500. The bulk of the added money—\$250,000—is for market development activities, including special marketing programs, and intensive studies of market patterns. Because the Nation is only partially covered with respect to school-lunch and similar programs, the balance will be devoted to filling these gaps.

The additional funds also permit an opportunity to strengthen the Market News Service in the major fish marketing areas. For this work, \$101,000 of the additional funds was allocated.

Part of the Gloucester, Mass. whiting fleet, with unloading and outfitting dock of Fisherman's Wharf Inc. in background. It is often called the "box" fleet because of boxes carried for packing fish aboard.





Left: When a sturgeon enters the fish ladders at Bonneville Dam, which isn't often, biologist Ivan Donaldson is called to take the live fish for further study.



Right: A salmon jumps from weir to weir in the experimental fish ladder laboratory at Bonneville Dam on the Columbia River.

Fish Ladder Tests on Columbia River

Aimed at facilitating passage of salmon over dams

By M. J. Ericson

IF the salmon, steelhead, shad, and even sturgeon entering the new experimental fish ladder laboratory at Bonneville Dam on the Columbia River knew how carefully they are being observed, they would be conceited! For nine pairs of watchful eyes of biologists and special technicians are scientifically recording every movement of the fish in crossing the experimental ladders. It's all part of a basic, long-range research program financed by the Corps of Engineers and accomplished by the U. S. Fish and Wildlife Service, who hope to learn more about behavior of fish in "climbing" various types of fish ladders.

The half-million-dollar "fisheries engineering research facility," as it is officially titled, is located inside the horseshoe that is formed by the long fish ladders on the Washington side at Bonneville Dam. Full-scale experiments have been conducted at the laboratory since last Spring, in an effort to gain further facts on how to best construct fishways so that they will pass fish in the most efficient and economical manner. The experimental laboratory has a great potential for developing specific engineering criteria for the design of future fish ladders.

Large Tank for Experiments

A wooden building 32 x 200 feet encloses a large testing tank connected to the north fish ladder by small entrance and exit ladders, thus enabling upstream migrating fish to enter and leave the experimental area without special handling. It is hydraulically in balance with the Washington ladder.

The tank may be transformed into ladders of varying widths, slopes and depths by means of temporary partition walls. Different sizes and shapes of openings in the weirs are tried, and depths and flow of water in the ladder are varied over a wide range.

The building is equipped with an elaborate lighting system to check the reaction of the fish to various light conditions. The lighting system consists of a battery of eighty-eight 1000-watt mercury vapor lamps on swinging poles, which can be placed over the flume. The fish can be tested in full daylight or total darkness, or any degree of light between the two extremes.

In direct charge of the fish ladder research is biologist

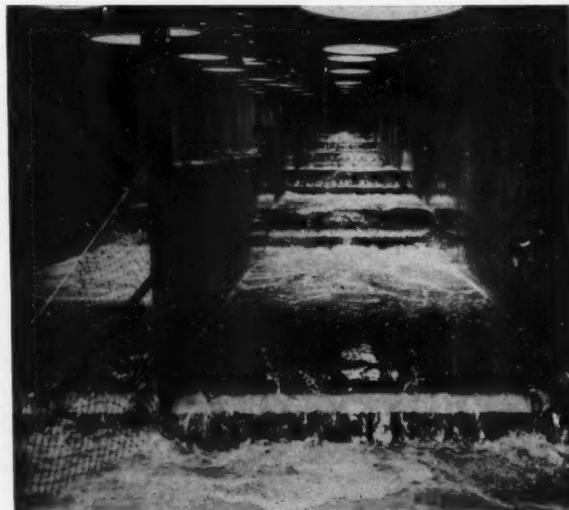
Carl Elling, who has spent ten years in herring and salmon research with the U. S. Fish and Wildlife Service in Alaska. He is assisted by eight biologists and special technicians. The project is under the direction of Dr. Gerald B. Collins, chief of the U. S. Fish and Wildlife Service's experimental facilities at Seattle.

Could Fishways Be Shorter?

Research done by the biologists includes "fishery gradient studies"—recording the time it takes the fish to pass ladders of various lengths. In one particular experiment, the flume was partitioned lengthwise and two ladders were constructed—one twice as long as the other. The fish ladders at Bonneville Dam have a rise of one foot for each 16 feet of length, or in the scientist's vernacular, a 1:16 ratio. In the experiment, one of the ladders had a 1:8 ratio.

Fish were released simultaneously in groups of 20 into the two fishways. Ten tests of 20 fish each were con-

(Continued on page 46)



A fish (extreme right) jumps in experimental ladder at Bonneville Dam.

How to Land Top Quality Groundfish

Canadian studies show trawlers should ice more heavily around pen boards, side walls, wings*

THE most effective operation aboard ship in insuring a groundfish catch of high quality is the icing and stowing. The most thorough washing on deck may add a day or two to the storage life of fish properly handled below deck, and the worst treatment may shorten storage life by the same amount. But the difference in keeping time between fish carelessly iced and properly iced is several days.

As fish are normally handled and iced aboard the Canadian trawlers, they may undergo sufficient spoilage after 5 days to make them second quality for either the fresh or the frozen fish trade. By proper handling, both above and below deck, the safe storage period can be extended to 7 to 9 days. This is the maximum storage period that can be expected from ice as the sole preservative.

Examination of landings from a large number of wood fish rooms on Canadian trawlers has shown that the side walls of the vessel, the side walls or the wings of the pens, and the pen boards form the principal areas where more ice is needed. In some cases, unfortunately, they are not being iced at all, while much heavier than necessary layers of ice are being placed between layers of fish. In other words, a sufficient quantity of ice is being used, but it is not always being used in the right places. To carry to sea sufficient ice to refrigerate the fish and to use a large part of this in foot-deep layers on and below shelves, with little attention paid to mixing ice with the individual fish and to shielding the fish from pen surfaces, does not provide the necessary stowage environment for the catch.

Ice should be so well laid down with stowed fish that after they are chilled, a surplus remains to surround each individual fish and to support individual fish away from pen surfaces.

Proper Icing Method

The following step-by-step procedure is suggested for icing fish in wood-lined fish pens:

1. Lay down a layer of fine ice, about 8 in. deep, in the bottom of the empty pen.
2. Raise a ring of fine ice about 5 or 6 in. higher than this bed all around the pen, providing a body of ice banked against the back wall, side walls or "wings", and front pen boards. This produces a saucer-shaped bed of ice to take the stowed fish.
3. Place fish to a depth of about 5 or 6 in. evenly over the bottom of this depression, not allowing the fish to rise above the top of the bank of ice at the borders of the pen. In the case of very large steak cod, this means that the "saucer" will hold a layer one fish deep (Fig. 1).
4. Place a layer of fine ice to a depth of about 1½ in. over all the fish, and raise the ice about 5 or 6 in. higher at the borders to produce another "saucer".
5. Repeat with layers of fish and ice. It is excellent practice to lay fish belly down and side by side in a more or less regular fashion in each layer, as is reported to be done in the case of cod stowage in Denmark. In this way, belly cavities drain, and the pressing together of belly flaps and the creation of pockets to collect drainage and ice water, both within gut cavities and between fish lying askew on their sides, are avoided.

Separation of fish with ice should apply not only to layers, but to individual fish as much as possible. It can be accomplished by stowing the fish loosely in each layer and by spreading fine ice over the fish, some of which will work down between the fish. This cannot be done

effectively if the layers of fish are more than two or three fish deep.

6. Ice off the pen below the first layer of shelf boards, never raising the ice above the top of the shelf board supports. (Shelf supporting angles or "rests" should be provided every three or four boards, and about three layers of fish should be stowed before shelving off.)

7. Lay shelf boards and cover them with a bed of ice about 1½ in. deep at the center and about 6 or 7 in. deep where banked at the walls.

8. Continue with layers of fish and ice as before, and take care of each shelf as before.

9. Ice off the fish at the top of the pen when the clear distance between fish and deckhead is at least 15 inches.

Ice can provide drainage channels for water and fish juices other than through the bulk of the fish itself. This probably is accomplished best if fish are shelved liberally and the shelves direct the water to the sides of the pen only. The other requirement is that the pen sides be well iced to allow the drainage water to pass to a lower level, and finally that a heavy bed of ice be used below fish stowed in the bottom of the pen to keep those fish clear of large concentrations of juices.

Amount of Ice to Use

For the commonly used insulated wood-lined trawler, about one part by weight of ice (if used as described above) to two parts fish will perform all the functions required of ice and will result in first quality landings in Summer for normal 7- or 8-day trawler trips.

The quantities of ice advocated above are used at the present time aboard some Canadian East Coast trawlers. Other ships use about 25% less ice. The improved quality of landings which would result from the proper use of larger amounts of ice on the latter boats, would more than offset the increased cost.

Boats easily could afford to ice this well, without suffer-



Fig. 1—Steak cod stowed in a "saucer" of ice in a fish pen. The sides and rim of the ice saucer keep the fish away from pen surfaces.

* This article is based on Fisheries Research Board of Canada Bulletin No. 103, by W. A. MacCallum of the Technological Station at Halifax, N. S.



Fig. 2—Heavy wire screens fastened to the wood wings of a fish pen retain ice and prevent fish from contacting the wood boards.

ing from shortage of stowing capacity. The side fish pens of a fish hold 36 ft. long would still weigh out about 200,000 lbs. of round fish, which is far above the average catch.

The proper preservation of fish stowed aboard ship requires that three conditions be maintained: (1) the fish must be kept as free as possible from bacterial contamination; (2) the fish must be kept in surroundings where atmospheric oxygen is available; (3) the fish must be chilled to and kept at about 32°F. Clean ice in adequate amounts and properly applied, fulfills these requirements.

It is necessary to cool fish right down to about 32°F. to decrease bacterial activity substantially, since the bacteria thrive in the living fish at fairly low temperatures—bottom water temperatures being as cool as the low thirties in certain instances. The results of cooling fish to and maintaining them at 32°F. are highly significant. Bacteria usually grow on fish about half as fast at 32°F. as at 37°F., and the fish have about twice the storage life if stowed at the lower temperature.

Causes of Groundfish Deterioration

Deterioration in groundfish may result from any one, or a combination, of the following factors: mechanical damage in the trawl, on deck, and in the fish hold; heat breakdown in the trawl, and on deck; autolysis caused by the digestive juices of the stomach and the intestine acting on the belly wall and recognized by the fisherman by such familiar signs as belly burn and liver stain; bacterial growth, productive of many stale, sour, and bilgy odors foreign to strictly fresh fish.

Mechanical damage from rough and careless handling in the trawl, on deck, and in the fish hold, refers to physical injury to the fish, resulting in soft, ragged, blood-stained and torn fillets. The fisherman should know how such damage is brought about: (1) by towing for too long a period; (2) by indiscriminate use of forks; (3) by stowage for excessive periods on deck; (4) by faulty handling during gutting and during stowing below deck and upon removal from the fish hold.

While damage during dragging cannot be prevented always, particularly in Summer when fish tend to be soft,

the shortening of the length of the tow reduces this damage considerably.

Blood stains and softening result when fish are bruised and crushed before they are bled. The remedy is simple—avoid walking upon and bruising fish in the deck pens; avoid forking the fish in the body, and begin gutting operations as soon as the empty trawl is shot away.

Loss in Fillet Yield

Loss in fillet yield results from careless cutting. A rip to the side of the vent during gutting results in a small fillet and open up sterile flesh needlessly to bacterial contamination.

Loss in fillet yield also results from poor handling below deck—at time of stowing, during stowage, and at discharge. Bruising and crushing below deck may be reduced by using chutes and by confining forking to the head. Squeezing and bruising during stowage may be reduced if layers of fish are shallow (approximately 6 in.) and about three layers only are carried on each shelf. Moreover, the catch should be shelved off before the fish and ice reach the shelf board battens or "rests".

Bruising, crushing and tearing of fish during discharge can be avoided if the fish are removed first from the front, working to the back of each shelf, and from the top to the bottom, working one shelf at a time where practicable, thus permitting the discharge man to stand on the shelves, not on the fish. The main damage done by forks is the tearing of the flesh which occurs when fish, firmly imbedded in ice in a pen, are forcibly pulled out. This results in a serious loss in fillet yield. When fish are discharged from the top of the pen down, this tearing of the flesh is avoided. Hooks probably damage the fish as much as forks do. In Denmark the fishermen use neither forks nor hooks, and apparently handle as much fish per man hour as with either.

Autolysis results from the activity of digestive juices in the gut of fish prior to butchering. Enzymes or chemical ferments in the juices may be sufficiently active to break down the gut wall and to attack the flesh. This is the common "belly burn" observed by all fishermen.

Belly burn may be accompanied by darkening of the fish flesh. It is aggravated in the case of "feedy" fish because the stomach of these fish, immediately before they were killed, actively produced digestive juices. Heat, resulting from exposure of fish on deck, speeds up belly burn. The precaution against belly burn is clean gutting as soon as possible after the fish are caught, and immediate icing.

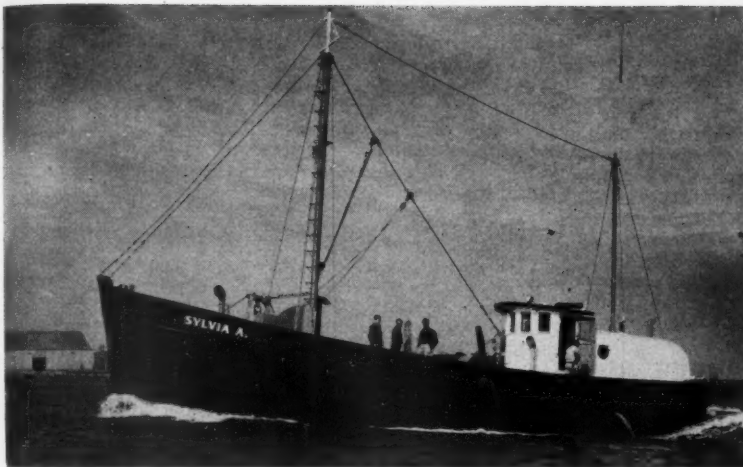
Notwithstanding, certain fish such as cod, haddock and flounder may be landed guts in, if well iced, and if the stowage period is short. Such practice is sound only when the fish are not feedy. Certain lots of Summer-caught cod, haddock and flounders have been kept ungutted when well iced in boxes aboard ship for periods up to 4 days, without appearing to deteriorate more rapidly than lots of the same fish held gutted under the same conditions. Longer storage than 4 days produced an accelerated rate of spoilage in the ungutted over the gutted fish.

How Fish Should Be Dressed

As dressing operations are done now, the fish may suffer damage in any of three ways: (1) the ripper may make a faulty rip; (2) the gutter may fail to remove all the gut; (3) the rippers and gutters may drop guts and feces from the fish being handled onto ungutted fish, which in turn now carry a bacterial load far greater than necessary.

In ripping during Summer fishing when gills are removed, the first cut should sever the throat but leave the gullet intact. The second cut should free the tongue from the gills. The third cut should rip the fish straight from the throat to the vent and should end there. If the rip is short, it is hard for the gutter to take out all the gut, and if a piece of the gut is left in, the storage life of the fish is shortened. If the rip extends past the vent, the flesh is likely to become contaminated and discolored. Rips which

(Continued on page 48)



New 60' dragger "Sylvia A.", built for Arthur C. Dase (right) of Atlantic City, N. J., by the Morehead City (N.C.) Shipbuilding Corp.

Two New Draggers Join Atlantic City Fleet

THE new 68' *Angie and Irene*, rigged for scalloping and dragging, and the new 60' *Sylvia A.*, outfitted for dragging, recently were delivered to their owners in Atlantic City, N. J. Both boats were constructed by Morehead City (N. C.) Shipbuilding Corp. The *Angie and Irene* is owned by William Pebler & Sons, while Arthur C. Dase owns the *Sylvia A.*

Following a successful trial run in the Atlantic Ocean, the *Angie and Irene* was turned over to Capt. George Pebler. On hand with Capt. Pebler was Mrs. Pebler, who christened the craft at the Morehead City shipyard.

The *Angie and Irene* is equipped with two 5" gallowes frames, one permanently mounted forward on the starboard side and the other interchangeable between the port side forward and the starboard side aft. The frames will be mounted forward for scalloping and fore and aft for dragging. Two booms are attached to the mainmast for scallop dredges. The hoist is a Hathaway Model 1353, center drive, carrying 600 fathoms of 9/16" Wickwire wire rope.

New Type Fire Protection System

A new type of fire protection system, developed by Ansul Chemical Co. and reportedly the first such installed, is mounted on the *Angie and Irene*. The system uses a

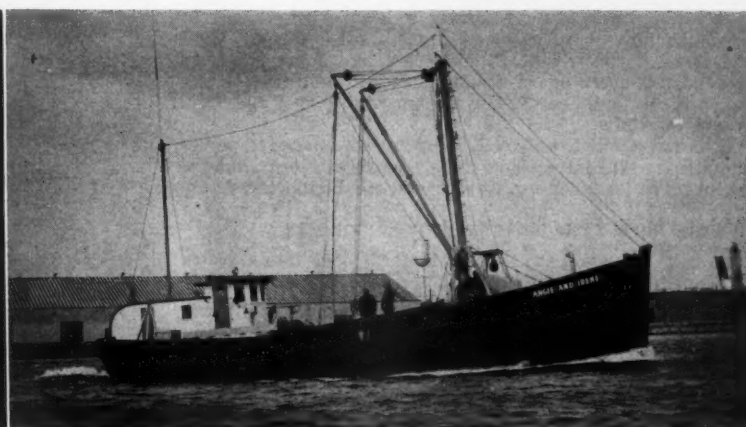
powder which is said to be especially effective on fuel oil fires. The powder is fed from two pressure bottles in the turtle back. Lines leading from the bottles go to two nozzles behind the fuel tanks, two directly over the main engine, and one over the auxiliary generator. In addition, powder can be supplied to a flexible rubber hose which can reach 12 feet.

The engine room also contains a 15 lb. CO₂ bottle and a 15 lb. powder bottle. There is a 5 lb. CO₂ bottle in the fo'c's'le and a 5 lb. CO₂ bottle in the captain's quarters.

The main engine on the *Angie and Irene* is a General Motors 6-110 Diesel, which turns a 52" x 38" four-blade Southerner propeller wheel through a 4½:1 reduction gear. The propeller is protected by a 1" x 2" flat-bar wheel guard. The auxiliary generator is a 3000-watt Onan Diesel model, with tail shaft driving a Jabsco pump with clutch. Another Jabsco pump is mounted on the power take-off. The engine room contains two 1050-gallon and two 500-gallon fuel tanks and a 60-gallon lube oil tank.

Electronic equipment on the *Angie and Irene* includes a Raytheon "Fathometer" Junior depth recorder, a Hudson American Mariner IV radiotelephone with standard broadcast band, and two APN-4 Loran units (one for standby).

(Continued on page 39)



Capt. George Pebler of William Pebler & Sons, Atlantic City, N. J., and his new 68' combination scalloper and dragger "Angie and Irene", constructed by Morehead City (N.C.) Shipbuilding Corp.

Great Lakes Fishermen Hampered by Weather

Sleet, snow, below zero temperatures, rain and stiff winds have curtailed commercial fishing operations recently in the Great Lakes. Production from the major portion of the lake fisheries has been extremely light, except from ice fishermen in the Bays de Noc area of Green Bay on Lake Michigan, where commercial yields of smelt have been liberal. Most of the smelt, however, were small in size. Jumbos are bringing almost twice as much as smaller sizes. On the bays, some fair commercial quantities of walleye and herring have been taken, while catches of whitefish have been poor.

On Lake Superior, ice fishermen in the Wisconsin area of the Lake have been getting some good commercial quantities of herring, while the lake trout "bobbers" have been taking light catches of trout through the ice. Whitefish yields from ice fishermen have been light in practically all commercial fishing areas of the big Lake. In the eastern end of Lake Superior, herring netters operating through the ice have been getting poor catches, while those operating in Minnesota and Wisconsin waters have been producing some nice catches, weather permitting.

On Lake Michigan, where rough weather has hampered fishing operations, commercial yields of smelt have been fairly good, while catches of perch have been much better. Yields of chub have been generally light, while takes of "rough fish" have been about average for this time of year.

In the Lake Huron area, commercial fishing has been generally light, except in the Saginaw Bay area, where catches of smelt have been good in small sizes. In the northern area of the Lake, smelt netters have been making some nice commercial hauls of the little silver fish, but catches of other fish have been poor to fair.

Ohio Landings Show Increase

The commercial catch of fishery products from fishing districts in Ohio during the ten-month period, March-December 1956, amounted to 24.9 million pounds, compared with 20.4 million pounds landed during the same period of 1955. Leading species during the ten-month period of 1956 were yellow perch, yellow pickerel (yellow pike), blue pike, carp, and white bass.

Warn of Danger from Electric Weirs

The Wisconsin Conservation Department has warned fishermen that electric weirs installed on sea lamprey spawning streams are dangerous to humans and should be kept away from. Each weir uses 110 volts AC current in the water. Because of their small size, sea lampreys and fish are merely stunned by this amount of voltage, but when absorbed by a man or a deer in the water, the same amount of voltage can prove fatal.

Barbed wire surrounds the devices, and numerous signs are posted warning of the danger. In addition, a log boom is stretched across the stream wherever boat travel might take place.

It is anticipated that by 1960 every sea lamprey spawning stream will have some sort of control device, and the weirs on at least the larger streams will be electrical.

Wants New Fish Hatchery in Wisconsin

A bill to establish a new Federal fish hatchery in Wisconsin to meet the demand for trout to stock Lakes Michigan and Superior, has been introduced in Congress by Rep. Henry Reuss.

Now that a full-scale sea lamprey extermination program is under way, it is estimated that at least five million young lake trout will be required each year for the next 10 years to bring back the lake trout population to its pre-lamprey strength.

The hatchery bill as introduced would include a laboratory for research in fish nutrition and disease.

Commercial Fishermen Supply Trout Eggs

Eight Marquette, Mich. commercial fishermen and five from Munising, Mich. turned over 156½ quarts of green lake trout eggs to the Michigan Conservation Department's Marquette hatchery, according to Russell Robertson, hatchery superintendent. The eggs will be hatched and the fry reared at the hatchery, after which the fish will be released in Lake Superior and inland lakes in a continuing re-stocking program.

Furnishes Live Walleyes for Planting

At Escanaba, Mich., shipments of live walleyes last Fall by Jensen & Jensen Fish Co. to lake and stream planting projects in Wisconsin and Illinois totaled 12,969 lbs., the largest total shipped in the three years in which the Escanaba fishery has been engaged in this stocking business. The University of Notre Dame and Wisconsin have supervised some of the planting projects. The fish have been fin-clipped so catches could be identified as planted fish and records kept on the survival rates.

Northern Pike Stay in One Area

Commercial fishermen and research experts of fishes in the Great Lakes region point out that northern pike rarely move over five miles from the area in which they domicile, while pickerel will travel as far as 35 miles, even in the rivers.

"Manville L." Sold

A chapter of Two Rivers, Wis., commercial fishing history, dating back to more than a century ago and through three generations, ended last month with the sale of the fishing tug *Manville L.* to Ralph Cross of Saugatuck, Mich.

Joseph LaFond established himself as a commercial fisherman at Two Rivers in 1852. He taught the trade to his son, Manville, who fished for more than 60 years before his death several years ago. In later years, four sons, Raymond, Guy, Julian and Hugo took over the business, operating as the Manville Fish Co.

The tug *Manville L.*, built in 1936, will be used by Cross as a harbor ice breaker for his fleet of fishing boats.

Ralph Carr New President of Mid-Central

Ralph E. Carr has been elected President and General Manager of the Mid-Central Fish Co. and its frozen food division, Bessack Products. He succeeds O. L. Carr, who now is Chairman of the Board. Other officers elected are Earl T. Palmer, Vice-President; Edward S. Graham, Secretary; and Gordon Maffry, Treasurer.



Evald Heininen of Cornucopia, Wis., and Alzard Bremel, easing a net under the ice.



The 52' x 16' x 6'4" shrimp "Mary Letha", built by Berwick LeBlanc (right) and Capt. Adam LaBove of Port Arthur, Texas, in their spare time. She was launched in 1950, after being moved about four miles from LeBlanc's backyard to the water. The shrimp's home port is Sabine, and her equipment includes 468 Buda Diesel, and 32 x 30 Columbian propeller.



Texas Boats Make Big Red Snapper Catches

Big catches of red snappers on the banks only a few hours off Port Aransas have attracted wide attention. In a three-day period, over 70,000 pounds of snappers were landed at Rockport and Fulton.

In one instance, a shrimp trawler which had temporarily converted to a snapper boat, found a snapper bank offshore and took 7,000 pounds on handlines in five hours' time. They delivered the fish to Rockport for ice, then returned to the same location. In seven hours they caught 9,900 pounds, and were forced to return to port to unload. The snappers ranged in weight from 3 to 25 pounds each.

Seven boats fishing out of Jackson Seafoods brought in 12,085 pounds, while other boats fishing for Johnson Fish Co. unloaded 27,100 pounds.

Edible finfish production for the 30-day period ending February 22 has been well above average. Large speckled sea trout were plentiful all along the coast, while black and red drum were taken in large quantities in the bays and on the South Gulf coast. Demand is good, and prices are average.

Total landings of edible finfish reported were 367,000 pounds.

Good Oyster Yields

Oyster production continues at a good pace along the upper coast in Sabine and Galveston Bays. Some oysters are being taken in the Matagorda area and landed at Rockport and Port Lavaca. An incomplete report shows a total of 5,687 barrels for the 30-day period ending February 22, a slight decrease from the 6,000 barrels produced in January, 1957.

Would Allow Shrimpers to Enter Port Mansfield

A bill recently passed by the Game and Fish Committee in the House and Senate of the Texas Legislature would permit shrimp boats with nets and fishing gear on board to enter the new harbor at Port Mansfield. Port Mansfield is now being constructed on Laguna Madre, half way between Port Aransas and Port Isabel. It will have a deep waterway channel through Padre Island into the Gulf of Mexico, and is expected to develop into one of the important fishing ports on the Texas coast.

Before the new bill was drafted, it was unlawful to take shrimp trawls into Laguna Madre.

Lee Named Director of Coastal Fisheries

Cecil Reid has been replaced as Director of Coastal Fisheries for the State Game and Fish Commission by

assistant director Howard Lee. Mr. Reid recently was named executive director of the Sportsmen's Clubs of Texas, and is opening offices in Austin.

For the past two years, Mr. Lee has been in charge of the Houston office of the Game and Fish Commission. He will now be located at the Rockport Marine Laboratory. Bob Kemp, assistant director at the Laboratory, will replace Mr. Lee at Houston.

New Trawler for Hardee

Delivery will be made soon on a new 67' trawler for Sea Garden Distributors of Brownsville, owned by W. L. Hardee. Built by Diesel Engine Sales Inc. of St. Augustine, Fla., the Capt. Jingle will be powered with a D342 Caterpillar Diesel, delivering 150 hp. at a speed of 1225 rpm., to drive a 50" x 34" Federal propeller.

Shrimp Production Increases Despite Weather

Unstable weather conditions, with storms, squalls and fog, prevailed over the Texas Gulf Coast area and into the South Gulf as far as Campeche Bay during late January and early February. Taking a chance on the weather, however, shrimp trawler captains made occasional trips outside and down the coastline to below Tampico. When able to drag, some good catches of large shrimp were reported. These came principally from the South Gulf area and off the central Mexican coast.

Landings at Texas ports totaled 2,271,900 pounds for the 30-day period ending February 22. These were heads-off brown grooved shrimp, and the count was good. The catch showed an increase of one million pounds over the preceding 30-day period, and was three-quarters of a million above the corresponding period in 1956.

Shrimp producers, generally, see a profitable year for 1957. Prices for most sizes are expected to be better than those of last year.

Herndon Opens Aransas Pass Branch

A branch of Herndon Marine Products, Inc. of Corpus Christi has been opened in Aransas Pass by Sydney E. Herndon. The plant is on the site of the former Patterson Shrimp Co. on Conn Brown Harbor.

Mr. Herndon leased the land for five years from the city of Aransas Pass and bought the facilities. The plant covers some 500 feet of waterfront on the west side of the harbor. It will package and wholesale shrimp, as does the L-head plant at Corpus Christi.

Would Increase Size of Doors on Bait Trawls

Rep. Gordon Forsyth has introduced a bill in the Texas Legislature which, if passed, will increase the size of doors used on bait trawls operating in Nueces Bay. Under present laws doors are limited to 12 by 18 inches. The proposed dimensions are 24 by 36 inches.

84-Foot "Stanley M. Fisher" Is Outstanding Scalloper

ONE of the best equipped vessels to join the Massachusetts scallop fleet is the new 84-foot *Stanley M. Fisher*, which started fishing in January. She is owned by Capt. George H. Fisher of Oak Bluffs, Mass., and was built by the Harvey Gamage Shipyard, South Bristol, Maine, from designs by Dwight S. Simpson & Associates of Boston.

The new scalloper incorporates the latest developments of the *Mother Frances* type of hull. The vessel is rather full bodied, has less deadrise than customary, and is finer at the ends. Her lines are patterned after those of large ships, and are calculated to provide greater speed with less effect on trim from extremes of load. The beam is 19'7", draft is 9'8", and register length is 72.1'. Tonnage is 101 gross and 71 net.

Construction specifications show the use of 10" sided oak keel, double 3½" sawn and molded oak frames on 18" centers, 2¼" oak planking, 2½" pine decking, and galvanized fastenings. The outside of the deckhouse is sheathed with ¾" marine plywood, while the inside is finished with ¾" plywood. A 2½" thickness of Fiberglas insulation is used in the fore and aft fish hold bulkheads. The vessel is painted with Pettit topside finishes and International copper bottom paint.

Complete Fire Protection

An outstanding feature of the *Stanley M. Fisher* is her complete fire protection. An automatic fire extinguishing system comprises two 50-lb. Kidde extinguishers in the engine room and one in the fore-cabin. In addition, there are three portable units at strategic spots. A Homatic Fire Alarm System provides 15 warning units throughout the vessel, through which an alarm is sounded by thermostatic control whenever the temperature reaches 165 degrees.

Propulsion power for the *Stanley M. Fisher* is supplied by a Model VT-12-M Cummins "Turbodiesel", rated 435 hp. at 1850 rpm. The engine has air starting and a Capitol 5.5:1 reduction gear. It swings a 5-bladed, 62 x 42 Columbian propeller on a 5½" Tobin bronze shaft. Hathaway stuffing box, Goodrich Cutless rubber stern bearing and Hodgkins bronze rudder post are used.

For auxiliary power, the vessel has a "Deseco-Lister" unit, comprising a 9 hp. FR-1 Lister Diesel, connected to 5 kw. 115-volt, Kurz & Root generator, Quincy air com-

Capt. George H. Fisher, Oak Bluffs, Mass., owner of the new 84' scallop dragger "Stanley M. Fisher".



pressor, and Jabsco pump piped for either bilge or deck service. There are two other Jabsco electric-driven pumps, arranged interchangeably for deck and bilge operation. Ample provisions are made for fire service on deck. A 2½" Edson hand deck pump completes the pumping equipment.

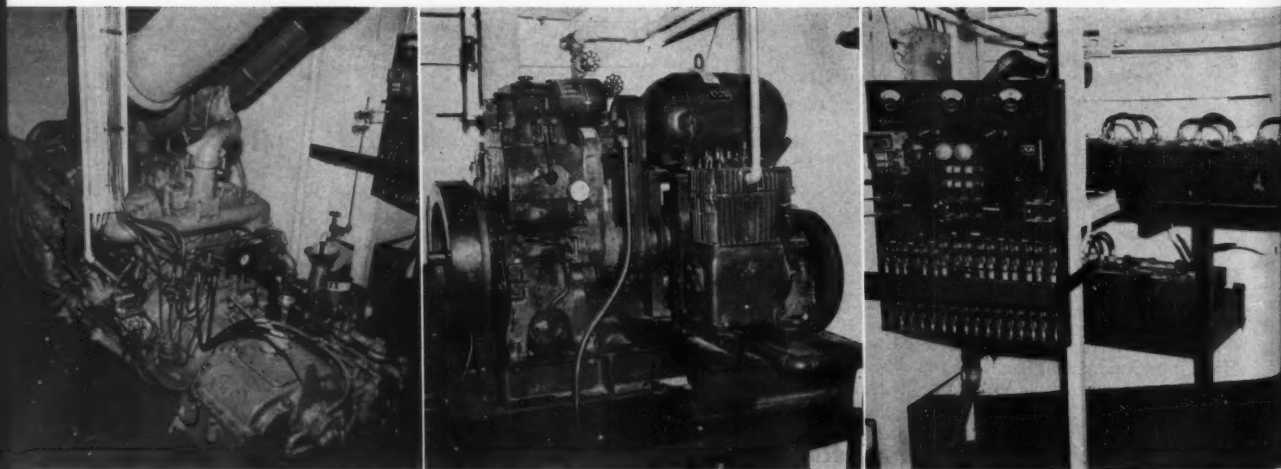
The engine room layout provides excellent accessibility to all machinery. A #30 Shipmate oil-fired hot water boiler feeds radiators throughout the after part of the vessel. There are two welded-steel fuel tanks either side of the engine, with total capacity of 4,000 gallons. Socony fuel and lubricating oils are used.

An engine air intake of 6" steel pipe, with rubber elbows, extends out to the after house. The engine room trunk is of steel, sprayed with cork to eliminate condensation.

Converter for Using Shore Power

In order to utilize shore power when at dock, the new craft has a fully automatic, 20-ampere Constavolt Marine Converter. This unit converts AC shore power to DC shipboard current, and is designed to supply all normal electrical needs of the boat while in port. On the *Fisher*, sufficient current is available to operate the fish hoist in unloading the catch.

The Constavolt equipment is mounted in the upper section of the engine room. It is permanently converted to the batteries, which are kept properly charged. It is completely automatic and self-adjusting, requiring no switches, relays or contacts for operation.



Engine room views of the "Stanley M. Fisher", showing left: 435 hp. Cummins "Turbodiesel"; center: 9 hp. "Deseco-Lister" Diesel auxiliary unit; right: electrical panel and 112-volt Surrette batteries.

The AC circuit from which the converter gets its power is electrically isolated from the DC circuit supplied by the converter, thus giving protection against AC electrolysis and damage of high voltage shock. A receptacle on the side of the deck house provides connection for the shore power, through a 100 foot extension line.

The vessel has an exceptionally good electrical system, with a 20 circuit panel. Plastic covered wiring, and double pole switches with fuses on both sides, are employed. Batteries are 112-volt, Type 8HHG-21 Surrette.

On deck are Hathaway Model 653 winch, two 5" gallows frames and six blocks, and a 5 hp. Bromfield electric fish hoist. The vessel carries a 200-pound Danforth anchor, two 12'8" 7-man Beetle Fiberglass life boats with Styrofoam-filled buoyancy tanks, and two 30" life rings. Lighting equipment includes 2 Crouse-Hinds 12" floodlights and a 10" Carlisle & Finch searchlight.

An innovation in the scallop washing box, located just aft of the whaleback, is an overboard outlet. The drain pipe extends through the bulwark, eliminating slime and odor from the deck.

Instead of being hung from the foremast, the two booms on the *Fisher* are stepped on deck. They are made of extra heavy 4" pipe and have steel ladders to facilitate going aloft to change tackle.

The pilot house and adjoining captain's stateroom are conveniently laid out to accommodate the vessel's full complement of navigating equipment. The steering section bulkhead encases the Metal Marine automatic electric steerer and Raytheon Pathfinder radar. Special shelving holds the two loran sets and 75-watt Raytheon radiotelephone, while the Raytheon Fathometer depth finder is enclosed in a wooden cabinet. The compass is a 6" White Constellation model.

The stateroom has built-in berth, plenty of clothes locker space and a large chart table. Direct access is provided to the after cabin, which contains two bunks.

There are nine bunks in the commodious fo'c's'le, each with individual reading lamp; also a folding leaf mess table with mahogany top. The galley has a #450 Shipmate oil-burning range, with hot water front supplying a 30-gallon copper tank. A double stainless steel sink and

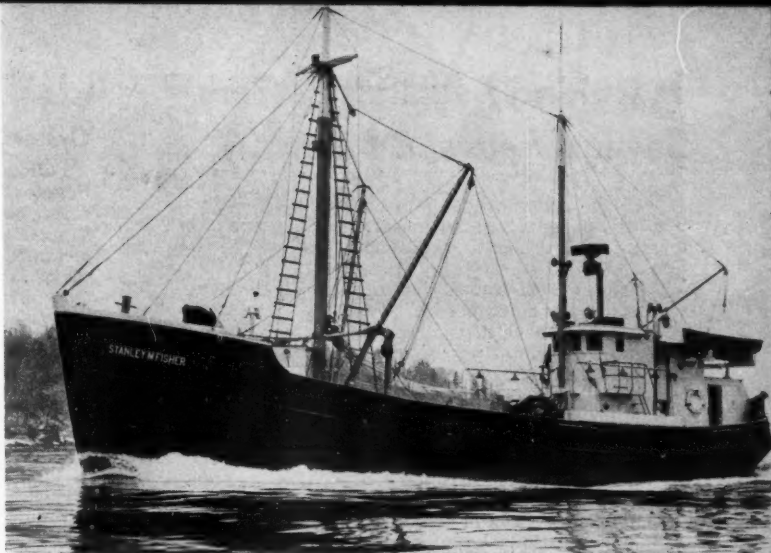
a lavatory for the crew have hot and cold running water, from a Fairbanks-Morse pressure system. Two galvanized fresh water storage tanks with 600-gallon capacity are provided, and there is a built-in ice refrigerator. A removable blower unit in the escape hatch gives good ventilation.

The after house provides enclosed passage from either side of the deck to the engine room and toilet room which has Mott fixtures.

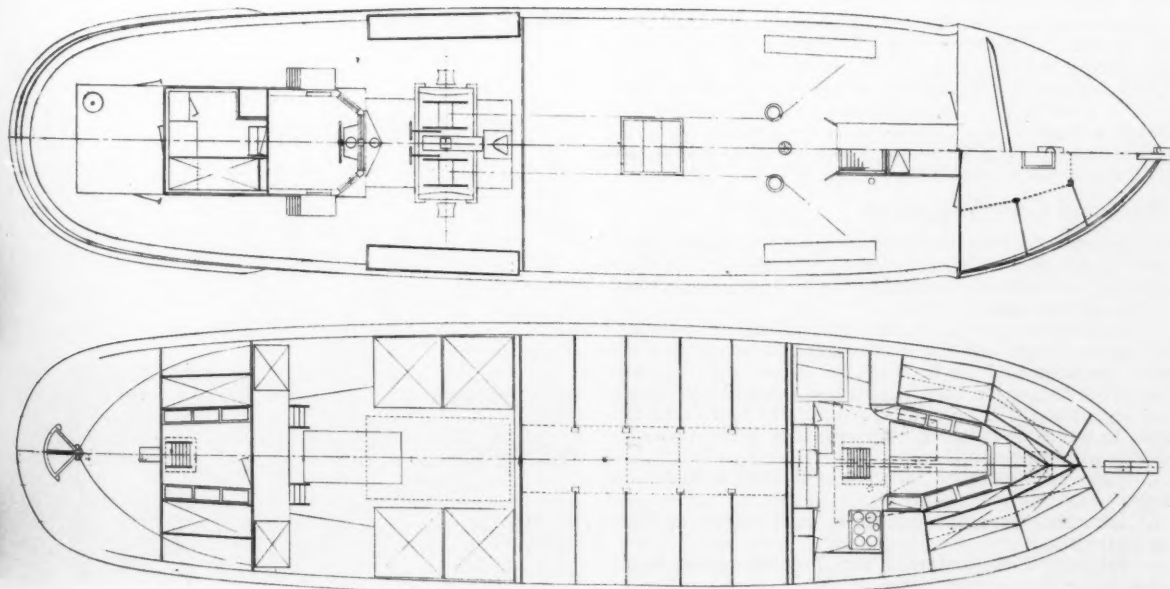
Capt. Emil Seaberg is skipper of the *Stanley M. Fisher*, and Joseph Morin is engineer. The boat carries a total crew of 11. Capt. Fisher was formerly skipper and co-owner of the *Connie F.* and part-owner of *R. W. Griffin*.

The first three trips landed by the new vessel were unloaded on January 29, February 13 and 28, at New Bedford and averaged approximately 10,000 lbs. of scallops per trip.

The Gamage yard is completing construction on a 92-foot dragger for Capt. Vincent Bono and Carmen DeLuca of Boston. She will be powered with a 500 hp. D397 Caterpillar Diesel.



New 84-foot scallop dragger "Stanley M. Fisher" on her trial run. She was built by Harvey Gamage, Shipbuilder, South Bristol, Maine.



Arrangement plans of 84-foot "Stanley M. Fisher" designed by Dwight S. Simpson & Associates.

Maryland Legislature Gets Several Seafood Bills

Seafood is in the headlines at Annapolis, with a number of bills introduced to clarify certain situations, and looking toward increased production as well as conservation.

Delegates Dido Tawes and Layton Riffin have a bill before the House to permit owners or leasers of private oyster beds to have their oysters harvested by out-of-State tongers, who would pay a license fee of \$15 in order to work on these private beds. The present law prohibits out-of-State tongers working in Maryland.

Another bill would allow all owners of private oyster beds to harvest their oysters by sailboat dredge, patent or shaft tonging during three consecutive weeks of their choice in the regular season.

A bill in the Senate introduced by Sen. Phipps of Anne Arundel County, would prohibit the use of "sponge" crabs in Maryland. However, Egbert L. Quinn of Crisfield has stated that to prohibit the catching of sponge crabs in Maryland would be useless unless the same thing is done in Virginia, where the great majority of sponge crabs are caught.

Last month a survey was to be made by the Tidewater Fisheries Commission to mark the boundaries of leased oyster bottoms in Piney Island Swash. A bill to permit the lease holders to harvest their oysters by dredging has passed the House of Delegates and is now before the Senate.

There seems to be growing sentiment in the Maryland Legislature to legalize power dredging. One bill already introduced would permit it in Anne Arundel County.

New Clam Plant to be Opened

Negotiations were completed last month for the opening of the Ocean City Clam Co., a branch of the Soffron Brothers Clam Co. of Ipswich, Mass. The new plant will be located in Berlin in a plant formerly occupied by the Peninsula Canning Co.

An estimated 40 employees will be hired by the company, which will produce clam chowder and other clam products. Ocean clams, purchased from the local fleet, will be used in the production by the plant.

Anticipate Increased Demand for Oysters

Crisfield oyster packers and watermen last month were anticipating an increase in the demand for oysters, with the arrival of Lent on March 6. In the past the Lenten season has meant much to the local seafood industry, since there is usually a lull in the demand for oysters after the first of the year.

The oyster dredging season closes on March 15th and the tonging season on April 15.

New Clam Laws Suggested

State officials were trying last month to draft emergency legislation which they hope will regulate the fast-growing clam industry and settle the controversy between oystermen and clam diggers.

Clammers now are prohibited from dredging over natural oyster beds, but the law is difficult to enforce because the charts of the beds are so vague and irregular. One of the things the Commission will ask in its proposed new legislation will be authority to define and mark the areas in which the clam dredges can operate. The Commission also proposes to:

1. Levy an inspection tax of 10 to 25 cents a bushel on clams.
2. Designate several locations in each county as buying stations.
3. Survey all the waters in the three clamming counties to bring charts up to date.
4. Set a closed season on clamming if that is found to be advisable.

5. Adopt some regulation to keep dredges a specified distance from the shoreline so as to protect properties.

Oyster Tongers' Advisory Committee

Following a recommendation by Worcester County Senator Ralph Mason, the Department of Tidewater Fisheries last month announced the appointment of five Worcester County men to an oyster tongers' advisory committee for the county. They are Levi Truitt of Snow Hill; Clayton Dukes of Girdletree; C. P. Cropper of Ocean City; Preston Pusey of Stockton; and Maurice Pilchard of Pocomoke City.

Ralph C. Hammer, shellfish culturist, and Capt. Richard C. Messick, shellfish superintendent of the Tidewater Fisheries Commission, will work with the newly appointed committee, which will study oyster propagation operations in the bays of the county.

Fresh Herring Appears on Market

Fresh herring were on sale in Crisfield's fish markets the middle of last month, indicating that Winter is on its way out. When herring start appearing, pound net fishermen prepare to get their gear out to catch both the main runs of herring and shad. The herring that have shown up so far are in very good shape.

Discuss Ways to Improve Oyster Production

A group of Smith's Island watermen met at Rhodes Point last month and discussed a program for increasing oyster production in the State, and also selected a nominee for a place on the projected five-man county committee to help designate how shells should be planted and where.

During the meeting the group voted to join a union if it would help; to present a bill for power dredging in Tangier Sound, with limitations; to present a bill for power dredging in the Chesapeake Bay, with limitations; to meet with the Delegates in Annapolis at any time. They elected Lorenzo Somers from Smith's Island as a member of the Watermen's Committee.

The Seafood Workers Union of Crisfield last month stated that they are vitally interested in increasing oyster production. The Union feels that the Maryland Legislature should examine every possibility for increasing production, especially the opening of the Potomac River to dredging and the wide use of power equipment on dredge boats, together with a program of increased shell and oyster planting, either public or private or both.

Fishing Boat Explodes

A Rock Hall fishing boat, the 39-ft. *Shangri-la* owned by Stewart Edwards, Jr., blew up and burned at a Solomons pier last month. The vessel was built by Stanley Vansant 16 years ago. He has been commissioned by Edwards to build a duplicate boat.



Owned and captained by Marvin Buteaud of Delcambre, La., the 50' trawler "Duchess" is powered with a Caterpillar D13000 Diesel.

North Carolina Fishermen Want Exemption from Sales Tax

A new classification for commercial fishermen came out of the annual meeting of the North Carolina Fisheries Assoc. at New Bern recently. There was complete agreement that fishermen are "Farmers of the Sea" as regards the proposal of the State Tax Study Commission to impose a sales tax on their purchases of fuel oil, engines, machinery, rigging and equipment.

That interpretation, advanced by Association Attorney John Rodman, had the support of the several members of the 1957 General Assembly present at the dinner meeting. Rodman told the Fisheries Association that Governor Luther Hodges is very sympathetic to the classification of commercial fishermen as "farmers" of the coastal waters.

A farmer is exempt from the sales tax, except the 1/20 of 1 percent manufacturer's tax, on all working equipment that generally has moving parts. Rodman says commercial fishermen are entitled to the same consideration as farmers.

Association president Garland Fulcher of Oriental presided at the annual meeting, and the following new directors were elected: Lewis Hardee, Otis Purifoy, Earl H. Holton, Milton Evans, Roy Watson, Sam McCotter, Clayton Fulcher, Jr., Clyde Potter, George Wallace, W. A. Ellison, Jr., I. J. Hudson and John Smith. Mr. Watson was elected vice-president of the Association, and Fred Whitaker of Kinston, who has been associated with the organization for more than a year in a public relations capacity, was named executive secretary.

Rescued from Trawler

Two fishermen, Snowden Quidley and Erris Waterfield of Hatteras, were rescued from their sinking trawler the *Sea King* last month. The vessel went aground five miles north of Ocracoke Lifeboat Station, and was badly pounded by heavy seas and strong winds.

A Coast Guard motor lifeboat was sent to the scene and took the two men to Hatteras, leaving the trawler in a sunken condition with only the pilot house and mast still out of water. The *Sea King* was owned by Donald Odin of Hatteras.

Increased Landings of Menhaden

Landings of commercially-caught fish and shellfish at North Carolina ports in December totaled 105.3 million pounds, compared with 68.1 million pounds landed during the same month of 1955. Although the production of food-fish and shellfish was low, receipts of menhaden were heavy, amounting to 98 percent of the December total catch.

During 1956 total landings of fishery products at North Carolina ports amounted to 300.7 million pounds. Menhaden accounted for 84 percent of this total. Other leading species landed were alewives, blue crabs, shrimp and croaker.

O'Neal Gets New Trawler "Miss Pearl"

Capt. V. J. "Puck" O'Neal of Morehead City is the owner of the new Hatteras Trawler *Miss Pearl*, constructed by the Morehead City Shipbuilding Corp. "Puck" O'Neal is a well known fishing fleet owner along the Carolina coast. His *Miss Pearl*, named after Mrs. O'Neal, is 55' in length, has a 16'6" beam, and draws 5'6" of water. Another Hatteras Trawler has been ordered by Capt. O'Neal.

In the engine room of the *Miss Pearl* is a General Motors Diesel, keel cooled, with a 3.75:1 reduction gear. There is a 40" x 32" four-blade Southern wheel, four 8-volt Surrlette batteries, a 750-watt Onan generator, a 1½" gasoline-driven Marlow pump, and a 1½" chain-driven Marlow pump connected with the winch shaft, and two 800-gallon fuel tanks.



The "Miss Pearl", 55' Hatteras Trawler recently delivered to Capt. V. J. O'Neal of Morehead City, N. C., by the Morehead City Shipbuilding Corp.

The *Miss Pearl* is the first Hatteras Trawler to be equipped with plastic pipe for the bilge lines. On deck is a Hathaway shrimp hoist, with two spools of Wickwire wire rope for trawling, and one 600' spool of Wickwire wire rope for the try net.

Navigation equipment includes a 76-CM Apelco radio-telephone; a 5" White Constellation compass; a One-Mile-Ray searchlight; and a Raytheon "Fathometer" depth sounder. A 300-gallon fresh-water tank is located aft of the fish hold, and there is a four-burner Real Host galley stove.

Louisiana Inside Waters Closed to Shrimping

The Louisiana shrimp trawling season for inside waters closed February 15 and will remain closed until April 15, according to F. L. Clement, director of the Louisiana Wild Life and Fisheries Commission.

With the closing of this area, shrimp fishermen must confine their operations to sea areas beyond the three-fathom limit.

New Shrimp Movie and Recipe Book

A new 16 mm. sound, color motion picture carrying the title of "Shrimp Tips from New Orleans" is now available. This film has an actual running time of 13½ minutes and is ideally suited for television showings, as well as being excellent for use at club meetings, cooking school demonstrations, etc. The movie illustrates a number of ways in which shrimp may be used, and features the fully peeled and deveined shrimp.

The movie may be borrowed, free of charge, by writing to the Fish & Wildlife Service, U. S. Dept. of the Interior, Washington 25, D. C. Both the film and a companion recipe book, completely in color, were sponsored by The Peelers Co. of New Orleans, leading manufacturer of shrimp processing equipment.

Morgan City Shrimp Get High Rating

Consumer's Union reported in its February issue that there are 34 brands of frozen shrimp on the market now, and that 8 of them scored "A" under their grading system, based on standards set up by the Fish & Wildlife Service.

One of the eight achieving an A grade was Riverside's 5 oz. can of cooked, peeled, deveined shrimp. Under the classification "Breaded Shrimp, Ready to Fry", Seapak Corporation's 10 oz. package received the Grade A mark. Both of these plants are located in Morgan City.



The "Edna McLean", 50' crab boat out of Mathews, Va., shown anchored at the Horn Harbor Seafoods dock. She is skippered by Capt. Melvin Armistead, who also is co-owner. Equipment includes a 100 hp. Buda Diesel and Linen Thread Co. Gold Medal nets.

Virginia to Engage in Rockfish Tagging Program

Biologists from the Virginia Fisheries Laboratory at Gloucester Point and the Maryland Chesapeake Biological Laboratory will work with scientists from Northern States this year and next in carrying out an intensive tagging program to determine how many of the rockfish off the New England Coast originally came from Chesapeake Bay.

It will be interesting to find how much movement of rockfish there is between the Maryland and Virginia part of the Bay. Tagged fish will be released at the same time in Maryland and Virginia rivers. Recovered tags will show how rockfish move within Chesapeake Bay, and will also trace their migrations to northern waters.

Fishermen will collect a reward for each tag returned, and also, by their cooperation, will contribute to better fishing.

Scarcity of Crabs

The crab dredge fleet of about one hundred vessels, which normally supplies the crabmeat market from December to March, has on the whole had a great scarcity of crabs in comparison to conditions last year when catches were too large for packers to handle. The scarcity of crabs forced prices up to \$8 and more.

During December in the upper or fresh-water sections of the Potomac, catches of catfish were increasing and more fishermen were turning to the opportunity offered to sell live fish to sports-fishing ponds.

The most plentiful fish in the fresh-water area was the mud or gizzard shad, with little demand for it. This species, a small shad, with little taste like the usual variety of shad, has increased to the point where it is a nuisance to the fishermen. The gizzard shad not only clutters up the nets and damages the twine, but crowds out desirable fish.

Draggers Land Good Catches

Four draggers—the *Kimberly*, *Powhatan*, *Malolo* and *Evelyn C. Brown*—brought a total of 143,700 lbs. of finfish into Hampton Roads area ports during the 24-hour period ending February 4, according to the Fish & Wildlife Service. Top catch was porgy, with 70,000 lbs.; followed by

sea bass, at 65,900 lbs. Other species were fluke, butterfish, bluefish and whiting.

Pound and gill nets accounted for 2,000 lbs. of carp; 1,300 lbs. of white perch; 700 lbs. of striped bass; 500 lbs. of catfish and 200 lbs. of shad.

Fishermen's Association Holds Convention

The annual Virginia Fishermen's Convention was held at Old Point Comfort on February 4 and 5, with 275 persons attending. H. R. Humphreys, Jr. of Whitestone was named president for the coming year. Other officers elected are: R. L. Haynie, Jr., of Reedville, vice-president; W. A. Mercer of Whitestone, secretary-treasurer; and Ammon G. Dunton of Whitestone, general counsel.

The executive committee will consist of B. O. Colonna, Harvey W. Smith, T. H. Jett, Jr. and George R. Wallace, in addition to the officers.

Preparing for Crab Potting

Crab potters are getting ready to set their pots. According to a rough estimate, there will be from 20,000 to 28,000 pots fishing in Tangier waters this Spring and Summer.

The Tangier crabbing fleet, which has been dredging on the hibernation grounds near Cape Charles, Va. since the beginning of January, is now divided. Six of the boats are still on the Cape Charles crabbing grounds, but the other six have sailed to the crabbing grounds in the mouth of the Potomac River.

Crabs are reported scarce on both grounds. The Tangier fleet near Cape Charles is catching from three to six barrels of hard crabs a day; and the boats on the crabbing grounds in the Potomac are doing no better. However, the Potomac crabs are larger and are bringing a better price.

Pound Fishing Getting Under Way

Pound fishing for shad and herring will start soon in Tangier and Pocomoke Sounds. Capt. Wyatt Pruitt, the only Tangier pound fisherman now operating, is putting out a net in Pocomoke Sound north of Watts Island. He was expected to start fishing about the first of March. He will have two other pound nets fishing in Cod Harbor at the southern end of Tangier Island.

Hampton Roads Area Landings

The fish catch in the Hampton Roads area during February amounted to 3,343,000 lbs., which was an increase of over a million lbs. as compared with the previous month, but a drop of half a million lbs. from February, 1956. Included in this February's catch were 78,900 lbs. of fish from pound nets.

The bulk of the February landings were made up of sea bass, with 1,383,800 lbs., and scup, with 1,138,100 lbs.

Massachusetts Fisheries Association Re-elects Carlson President

The Massachusetts Fisheries Association, at its recent annual meeting, elected the following officers for 1957: James S. Carlson, Baker, Boies & Watson, President; Sidney Cohen, Shamrock Fisheries, Inc., Vice-President; John F. Dolan, L. B. Goodspeed, Inc., Treasurer; Sidney K. Jones, Booth Fisheries Corp., Assistant Treasurer; and Patrick J. Callahan, O'Hara Brothers, Inc., Secretary.

In addition to the officers, the following were elected to the Board of Directors: James Fitzgerald, Frank Delahoyde, Gregory Sacca, Ralph Chiacchio, Harold Randlett, Ralph Ventola, Walter Shute, David Choate, Jr., Frank Shinney, and Bart Tribuna.

Maine Sardine Packer to Open New Portland Plant

Holmes Packing Co. of Eastport and Rockland last month reported they will open a new, modern sardine packing plant in Portland in June, employing 75 women and 15 men. A \$100,000 Belgian cooker used last year at one of the firm's two Rockland plants will be installed in the Portland plant. The machine is an automatic device which moves the herring from a raw to a cooked product on a production line basis.

The plant will be managed by Francis J. O'Hara, and one sardine carrier will operate out of Portland.

Ask Legislature to Kill Two-Inch Clam Law

Legislators last month were urged to kill the law banning digging of soft shell clams of less than two inches in length. Representatives of the Sea & Shore Fisheries Dept. said that the two-inch limit has not worked as a conservation measure. Control of digging by restrictions on areas was favored instead by Robert L. Dow, research director.

At a hearing on February 27, a legislative committee listened to the pros and cons of the clam law. Kenneth Spear, spokesman for 32 diggers, said the ban on clams less than two inches in diameter "gives to the sea gulls" thousands of clams that should go to market.

Raymond Howe of Portland said he would like to see some conservation, and that to remove the ban would deplete certain areas. Another opponent, Cecil Robbins, said he wants the law enforced.

Green Nominated as Fisheries Commissioner

Maine's Governor has nominated Ronald W. Green of Rockland as Sea and Shore Fisheries Commissioner, to succeed Stanley R. Tupper, who resigned recently. Green joined the Sea and Shore Fisheries Department in 1946 as Captain of the patrol boat *Maine*, and worked up to the position of Chief Warden and Deputy Commissioner. A Lubec native, he worked on sardine boats before enlisting in the Coast Guard in World War II.

Proposes Doubling Lobster License Fee

A plan to step up the State's lobster propagation work and also to promote lobster sales was suggested last month by State Representative Shepard of Stonington. The plan entails doubling the present \$5 annual fee for a lobster fishing license.

The revenue from this extra fee—about \$28,000 a year—would be used for two purposes: to buy egg-bearing lobsters from the dealers and, with any balance, to advertise and promote lobster sales. Rep. Shepard said he does not intend to introduce the bill until he has learned how fishermen feel about it.

Fishermen's Association Re-elects Gallant

The Maine Fishermen's Association met last month in Rockland and elected Capt. Henry Gallant, founder of the group, president for his third one-year term. Other officers elected were Henry Columb of Thomaston, first vice-president; William Molloy of Rockland, second vice-president; Miss Lillian Messer, treasurer; and Mrs. Hazel Hocking, secretary.

Nonresidents Barred from Owls Head Clam Flats

Nearly a score of State troopers, deputy sheriffs and coastal wardens moved onto the clam flats at Owls Head last month to assist in enforcing a nonresident digging regulation, after the law was declared "legal and constitutional" by Knox County Attorney Curtis M. Payson. The action began on the 23rd after nearly 50 out-of-town diggers ignored an admonition not to dig until the legality of the law was determined.

An article is to be inserted in the town warrant for the



Capt. Manville Davis of Monhegan, Maine, is the skipper of this trim lobster boat, the 38' x 10'6" x 3'6" "Grayling". Power for the craft is furnished by a 150 hp. Cummins JMS-600 Diesel, with 2:1 Capitol 2HE-10,200 reduction gear. At an engine speed of 2200 rpm., with a 26" x 19" three-blade Columbian propeller, the "Grayling" cruises at about 10½ knots.

town meeting this month to see if the voters want to change the law or leave it as is.

Fisheries Courses Being Set up in Schools

Two units of a projected fisheries education course are now in the hands of teachers at the Boothbay Region High School. The course, designed by the Dept. of Sea & Shore Fisheries, is being set up in many coastal elementary and secondary schools. Its purpose is to prepare future generations of Maine fishermen to meet the problems of their industry more intelligently and efficiently.

Study units now ready for use deal with the soft-shelled clam and the scallop. A third unit on the lobster is in preparation and is expected to be ready for distribution soon.

Reed Shipyard Burns

A quarter-million-dollar flash fire swept swiftly through the Reed Shipyard, Boothbay Harbor, last month, destroying three buildings, a storage shed, marine railway and seven boats. The Shipyard was built by the late Irving Reed about 52 years ago, and for the past 10 years it has been operated by Rodney Reed and his wife Grace. They are planning reconstruction of the yard in the near future.

Gallant Enters Oil Business

Gilbert Barker of Rockland has sold a part interest in the Marine Fuel Co., the former Thurston Oil Co., to Capt. Henry Gallant. Gallant, head of the Maine Fishermen's Assoc. and operator of Capt. Henry's Wharf in Rockland the past two seasons, joined the firm last month. Both men said they plan to service the fishing fleet with Diesel and lubricating oils.

Lobsterman Lost at Sea

Kendall Hawkins of St. George, 31-year-old lobsterman, was presumed lost at sea last month when his empty lobster boat, with its motor running, was found by his father and an uncle. A widespread air and sea search was instituted and carried on for three days, but no trace of the lobsterman was found.

George I. Hodgdon

George I. Hodgdon, 75, of East Boothbay, died last month after a short illness. Mr. Hodgdon was one of the country's outstanding master builders, and was the third generation of boat and yacht builders at the Hodgdon Bros. Yard.

The firm will now be headed by George I. Hodgdon, Jr., who worked with his father for many years.



67' shrimper "Pamscott" owned by Harold Nelson of Tampa, Fla., and built by Diesel Engine Sales Inc., St. Augustine. Her topsides were finished with International paint; she is rigged with Columbian rope, and is insulated with Styrofoam. Equipment includes Caterpillar D337 Diesel, 3:1 Twin Disc reduction gear, 50 x 42 four-blade Columbian propeller, Goodrich Cutless rubber stern bearing, Jabsco pump, Petter Diesel auxiliary generator, Surrrette batteries, 515½T Stroudsburg hoist, and One-Mile-Ray searchlight.

Alabama Approves Proposal for Artificial Snapper Banks

The Sea Foods Division of the Alabama Conservation Department was recently given approval for construction of artificial snapper banks off the south side of Dauphin Island. The action came as part of the Department's advisory board budget meeting, where budget requests for the next two fiscal years were approved.

Legislative proposals included: requiring wholesale and retail licenses for minnow dealers and inspection of bait minnows sold; licensing of mussel fishermen; a uniform boat safety law similar to those in some other States; a reciprocal agreement on fishing licenses between Alabama and Georgia.

Fishing Vessel Towed In

The Star Fish & Oyster Co. schooner *Peggy G.*, last month towed into Mobile a Panama City fishing boat, the *Seabass*, with a crew of six aboard.

Capt. Archie Robertson, master of the *Peggy G.*, said that due to strong northwest winds, it took 50 hours to tow the disabled vessel into port. The *Seabass* is owned by Alvin Cook Fish Co. of Panama City, Fla., and it is now being repaired in Mobile.

Georgia Bills Would Protect Shrimp and Spawning Crabs

Bills pertaining to taking shrimp for bait and protecting spawning female crabs were introduced in the Georgia House last month.

One measure would require shrimp taken for bait in Georgia waters to be used or sold solely within the State. The proposal would amend a 1956 act authorizing shrimp to be taken for bait with power-drawn nets by inserting the limitation "within Georgia" to the provisions of the act.

The second bill would provide that an act protecting spawning female crabs would apply only during the months of May and June.

Landings Mostly Shrimp and Crabs

Total landings of fish and shellfish in Georgia during the calendar year 1956 amounted to 16.8 million pounds. Shrimp and blue crabs accounted for 95 percent of the total catch. The remaining 5 percent consisted mostly of king whiting, shad and oysters.

Shrimp and blue crabs also made up most of the 741,000-pound December seafood landings at Georgia ports. Heavy fog hampered all phases of fishing operations for over two weeks, and many of the fishing vessels did not leave the docks during the month.

Most of the Georgia shrimp landings during December were made in the southern section of the State, and consisted of white shrimp of a size numbering 31-35 to the pound. Vessels landing in this section reportedly were catching from 200 to 400 pounds per fishing day.

Duggan Named to Atlantic Marine Commission

Governor Marvin Griffin of Georgia has named J. Roy Duggan of the SeaPak Corp., St. Simons Island, as one of the Georgia members to serve on the Atlantic States Marine Fisheries Commission. Mr. Duggan is active in public service for the fishing industry, and is now serving as President of the Southeastern Fisheries Association, President of the National Shrimp Congress, as well as Vice-President of the National Fisheries Institute.

New Jersey To Have New Clam Processing Plant

Point Pleasant Beach Council last month gave tentative approval to plans for the construction of a clam processing plant. Peter Soffron of Ipswich, Mass., told the Council that his firm plans to build a 180 x 50 ft. building on Channel Drive and employ some 30 persons when operations are begun, with the possibility of employing between 50 and 60 later on.

The plant would shell and clean clams and pack them in ice for shipment to restaurants. All shells and refuse would be trucked away from the plant daily.

The firm plans to operate its own boats or to retain local fishermen to dredge for clams offshore. Soffron said that the clams would be processed the same day that they are received.

Protests Channel Dredging Plans

Dr. Thurlow C. Nelson, a member of the State Water Policy Commission, recently predicted that Barnegat Bay fishing would be harmed if present channel dredging plans are carried out. The proposed dredging will shorten the useful life of the bay by 10 to 20 years, the biologist warned, and stated that the Army's plans would add to the present rate of shoaling. Dr. Nelson recommended that the fill be placed on the mainland to help develop marshy areas along the bay shore, or to replace any shoreline being eroded.

Charles A. Aspenburg

Charles A. Aspenburg, 75, died at his home in Wildwood last month. Mr. Aspenburg had operated Aspen Fish Products in Middle Township for 33 years.

In 1903 he figured in a sensational rescue, when he saved 10 persons from drowning in a fishing boat disaster off the local coast. For this action he was awarded a Congressional Medal.

In 1945 he was named a member of the Atlantic States Marine Fisheries Commission.

Big Gain in Landings for Year

Landings of fish and shellfish at New Jersey ports for the year 1956 totaled 506.8 million pounds valued at 13.5 million dollars. Compared with the 1955 production of 412.6 million pounds, 1956 showed an increase of 23 percent. Items landed in greatest volume included the following: menhaden, with 460.7 million pounds; surf clam meats, 11.1 million pounds; fluke, 6.0 million pounds; and scup, 5.6 million pounds.

Landings of fish and shellfish during December 1956 amounted to 4.4 million pounds, valued at \$721,000 to the fishermen.

It gives you added safety at sea,
lower operating costs . . .

Gulfpride Marine H.D.

the world's finest oil for fishing boat engines



Alchlor-Processed Gulfpride Marine H.D. Oil keeps engines cleaner!

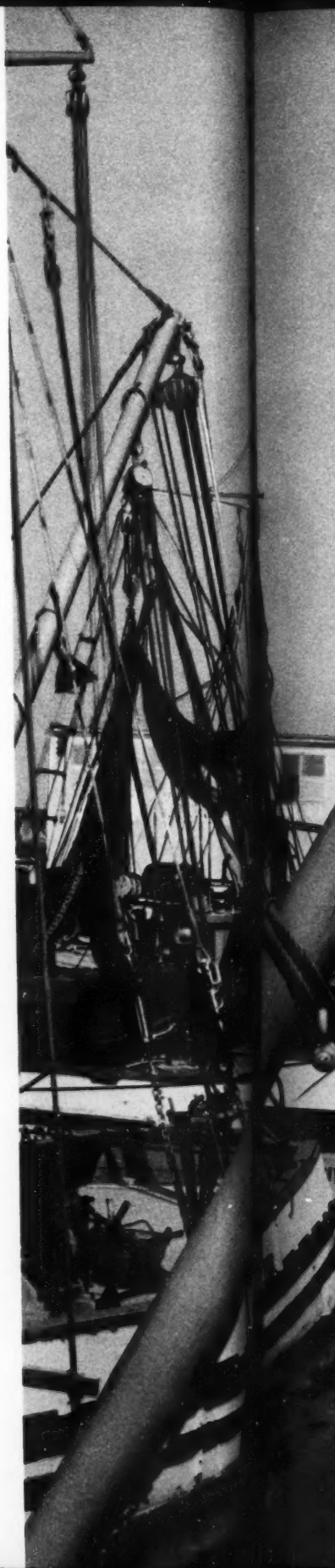
Gives more work hours between overhauls!

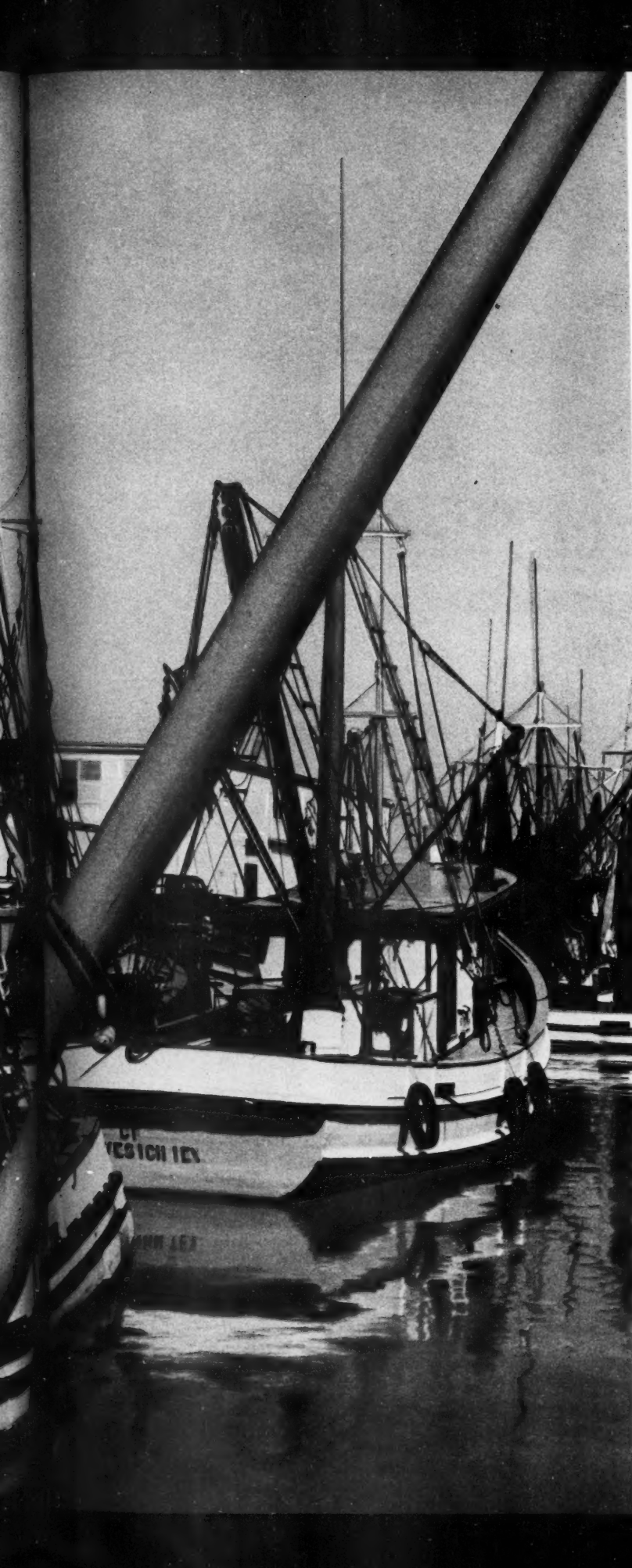
Insures greater engine dependability!

Here's why: Alchlor-Processed Gulfpride Marine H.D. is a heavy duty oil with a tough, long-lasting lubricating film . . . a high detergent oil, fortified with the right combination of the right additives. Gulfpride Marine H.D. keeps engines cleaner, reduces rate of wear of moving parts—lowers your maintenance costs, and keeps engines working, with less frequent out-of-service time!

All base stocks used in Gulfpride Marine H.D. have natural body—no artificial thickeners to break down in service! This is another good reason why it provides better protection, over longer periods of working time, for both gasoline and Diesel-powered boats. Because of Gulf's exclusive Alchlor Process, Gulfpride Marine H.D. offers a new high in economy, performance, dependability!

**Next time...fill your crankcase with
Gulfpride Marine H.D. Oil!**





Here's what the Alchlor Process means to you:



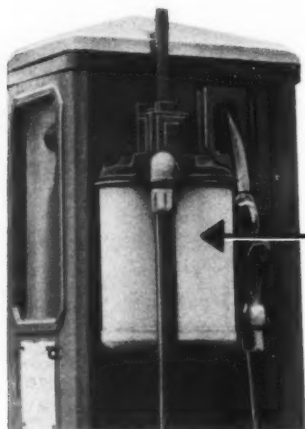
This oil has been refined—but not yet Alchlor-Processed. It has gone through the usual steps of refining.



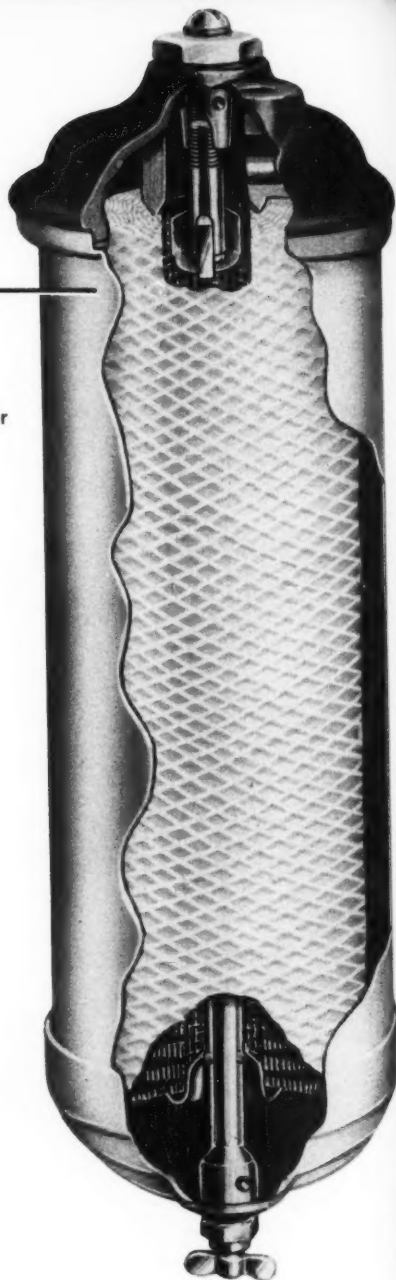
Here you see the part—about 15%—which is discarded by the Alchlor Process. Unstable hydrocarbons, sludge-forming elements are removed. The Alchlor Process weeds out more harmful elements than any other refining method!



And here is the final base stock for Gulfpride Marine H.D. It has been refined, then super-refined by the Alchlor Process. Now it is ready to be fortified with special additives that provide additional resistance to oxidation and help prevent corrosion.



Cutaway of micronic filter



Gulf Dieselect Fuel

... the other half of a perfect team
for added safety at sea

Gulf Dieselect Fuel provides prompt ignition, smooth, even burning and maximum power.

And Gulf Dieselect Fuel *is delivered to you as clean as when it left the refinery.* Gulf Marine Dealers all have pumps equipped with micronic filters. These filters screen out all solid particles as small as 60-millionths of an inch! Such micronic filtering helps insure smooth, dependable engine operation.

A straight run distillate, Gulf

Dieselect Fuel does not form harmful deposits in fuel systems and injectors. It vaporizes quickly in the combustion chamber . . . burns completely. It helps prevent fouling of oil control rings, reduces valve sticking, and assures knock-free performance even at low speeds.

Call your Gulf Sales Engineer today—he's at your nearest Gulf office. Ask him about Gulf's perfect team for dependability and safety at sea.

GULFPRIDE MARINE H.D. OIL • GULF DIESELECT FUEL

THE FINEST PETROLEUM PRODUCTS FOR ALL YOUR NEEDS

Mail this coupon today for complete details on this power-performance team!

Gulf Oil Corporation
1822 Gulf Building, Pittsburgh 30, Pa.

Send me more information on

☐ Gulfpride Marine H.D. Oil ☐ Gulf Dieselect Fuel.

Name _____

Title _____

Company _____

Address _____

City _____ Zone _____ State _____



GULF OIL CORPORATION
1822 Gulf Building, Pittsburgh 30, Pa.

Wa
Pro

Two
sourc
resea
fisher
to \$50
intera
ing co
ington
ment.

It i
tions
Colum
reven
the d

It v
not b
bia b
Howe
bia b
zation

This
contin
is sus
the n

Esca

The
fishin
of Va
crew,
were

Hali

De
the H
mont
in pla
ley o

To R

For
relea
year
will l

Scho

Ro
Fishe
recen
tiona

Cha

Th
cold
the p
Spok
the d

Mur

Th
the
Murr
Thom
berg,
Vice-

He
tive
D. C
assoc
estab
at 30

MAR

Washington Would Benefit from Proposed Research in Columbia

Two new programs aimed at saving the fishery resources of the Columbia basin, one calling for a \$5,500,000 research effort and the other directed at rehabilitating the fishery of the Upper Columbia River at costs of \$35,000,000 to \$50,000,000 have been presented to the Columbia basin interagency by its fishery steering committee. The steering committee, made up of the fishery agencies of Washington, Oregon, Idaho, Montana and the Federal Government, spent two years on the two projects.

It is further suggested that grants from various foundations be sought to pay for specific research, and that a Columbia basin account be set up to pool a portion of revenues from Federal hydroelectric projects to help pay the damage done the fishery resources by the dams.

It was agreed in the reports that fishery research has not been able to keep up with the demands put on Columbia basin fisheries by the rapidly changing environment. However, it is felt that the fish populations of the Columbia basin can be rebuilt and maintained, if given organization, planning, public support and financial adequacy.

This program is a long-range one, looking toward the continued development of the fishery resource. The goal is sustained yield—fish for all times, in numbers to meet the needs of the people, both for food and recreation.

Escape from Burning Craft

Three Seattle men escaped injury when their 60-ft. fishing boat *Thoreen* was swept by fire off the west coast of Vancouver Island, forcing them to abandon it. The crew, Thor Botton, Tom Gould and Chester Carlson, were picked up by another fishing boat, the *Torvenskjold*.

Halibut Fishermen Decide on Eight-Day Lay-up

Delegates to a coastwise conference of all sections of the halibut fleet in major Pacific coast ports voted last month to recommend an eight-day lay-up between trips in place of the 10 days recommended by the halibut parley of last December.

To Release Millions of Salmon

Four and a half million marked young salmon will be released in Washington streams this year, topping last year's record by a half-million fish. Almost 1½ million will be fall chinook released in the Deschutes River.

Schoettler Resigns as Director of Fisheries

Robert J. Schoettler, Washington State Director of Fisheries since October 1950, submitted his resignation recently. He also resigned as Chairman of the International Pacific Salmon Fisheries Commission.

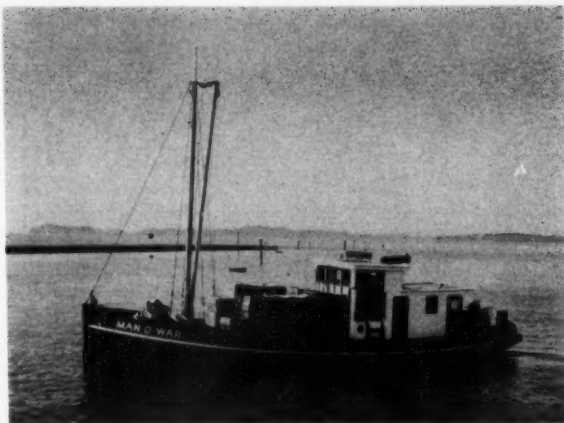
Change in Seattle Cold Storage Business

The Port of Seattle has decided to go out of the general cold storage business, effective March 4. From that date the port will receive only fish and fish products at the Spokane St. terminal. The decision was brought about by the demand for more fish storage space.

Murray Heads Association of Pacific Fisheries

The Association of Pacific Fisheries recently elected the following as officers for the coming year: E. E. Murray, President; A. W. Brindle, First Vice-President; Thomas F. Sandoz, Second Vice-President; S. M. Rosenberg, Third Vice-President; and A. R. Barthold, Fourth Vice-President.

Herald A. O'Neill was appointed February 1 as Executive Secretary of the Association, succeeding Dr. Ernest D. Clark. Mr. O'Neill, a practicing attorney, has been associated with the salmon industry since 1940. He has established offices for the Association of Pacific Fisheries at 302 Colman Building, Seattle.



BUILT IN 1926, the 65' "Man O'War" is one of the best known cannery tenders on the Columbia River. She is owned by Chinook Packing Co., Chinook, Wash., and has a gross tonnage of 28.46 and a net tonnage of 17. Power is furnished by a 75 hp. Union Diesel.

Wants Regional Fishery Headquarters in Seattle

Senator Warren G. Magnuson has asked for the establishment in Seattle of the Pacific Coast regional headquarters of the Fish & Wildlife Service. Magnuson has pointed out that Seattle is one of the country's leading fishing ports, and said that such a headquarters would provide a Pacific Coast clearinghouse where commercial fisheries matters of a practical nature could be discussed with both fishermen and the public.

He also said that 48 large packers with interests in Alaska and along the Pacific Coast maintain offices in Seattle.

Three Seafood Firms Merge

Three fish and seafood operations in Everett are being combined into one corporation to be known as the Everett Fish Co. They include the present Everett Fish Co., Trafton Seafood Co. and Chase Seafood Co. Stephen Chase has been named president, Nick Radovich, vice-president and Claude Meehan, secretary-treasurer.

Mr. Chase said that the new firm is expected to process more fish and other seafoods than the three former companies processed together, and plans already have been made for improvements and additions to the plant.

Seattle Otter Trawl Landings for February

Otter trawlers landed 40 trips at Seattle during February, and the catch totaled 1,215,000 lbs. This was a drop of 367,000 lbs. from the previous month, and about half a million lbs. less than in February, 1956. The top variety was petrale sole, with 256,000 lbs., which was over double the catch in February of last year. True cod was a close runner-up, with 252,700 lbs., but this variety showed a drop of nearly 75,000 lbs. from the same month in 1956.

Favor International Pink Salmon Treaty

A resolution asking Congress to ratify an International agreement to place the pink salmon fishery of the Fraser River system under the International Pacific Salmon Fisheries Commission has been adopted by the Washington House at Olympia 92-0.

Gustav Strand

Gustav Strand, a well-known leader in the Pacific Northwest fishing industry, died in Aberdeen, Washington last month. He was a native of Norway, and had once operated canneries in Aberdeen, Hoquiam and Alaska. He first came to Grays Harbor in 1912 to manage the Union Cooperative Cannery, which he later purchased.



Orville V. Bobell, right, and Henry Fleach, gill net fishermen for chum salmon in Tilamook Bay, Oregon, mending nets at Charleston.

Oregon Has Good Escapements Of Spawning Silver Salmon

Silver salmon spawning escapements in Oregon tributaries of the lower Columbia River this Winter have been the third highest on record since 1948. Surveys covered a total of 46 miles of representative spawning areas known to be utilized by silver salmon. An average of 19 fish per mile was present in the areas surveyed. The highest fish per mile index for lower Columbia areas was 21 in 1951.

Two other factors indicate good spawning escapements of silver salmon in at least localized areas of the lower Columbia drainage. At Bonnie Falls on North Scappoose Creek, 149 fish, presumably silver salmon, have been recorded moving upstream by an electronic fish counter in a fishway at the Falls.

Silver salmon counts last Fall at the Oregon City Falls on the Willamette River were the highest of the three years that counts have been made.

Would Ban Steelhead Fishing in Columbia

Commercial fishing for steelhead trout would be banned in the Columbia River and its Oregon tributaries by a bill introduced in the Oregon Legislature to define steelhead in these waters as a game fish. Leander Quiring of Hermiston, sponsor of the bill, explained that commercial fishing has been permitted on the Columbia and all its tributaries except the Rouge River and its tributaries.

The Oregon State Fish Commission, in conjunction with the Washington State Bureau of Fisheries, adopted a regulation closing the Columbia River above Bonneville Dam to commercial fishing in 1957. Purpose of the move is to permit greater escapement of salmon and steelhead to the spawning grounds in a joint program for the upbuilding of the fishing industry.

Plans for New Hatchery Completed

The Oregon Fish Commission announced last month that final plans have been completed for construction of the Cascade salmon hatchery on Eagle Creek, Columbia River tributary just above Bonneville Dam.

The new fish plant will have facilities for raising 11½ million salmon annually. Fall Chinook salmon will be the primary species propagated, but production of approximately 1,000,000 chum and silver salmon each year is anticipated.

Hatchery Salmon Survive Cold

During a recent spell of cold weather, fish rearing ponds at most of the stations were coated with ice. Fortunately, young salmon don't feed as actively at lower water temperatures, so feeding was not too great a problem, but openings still had to be maintained in each pond to keep a continuous supply of oxygenated water flowing to the fish.

Screened headworks, where entire hatchery water supplies are diverted from streams, presented other problems for the fish culturists. Ice kept forming on the screens, threatening to choke off the supply of water to the fish ponds, and the men had to keep a 24-hour vigil at the headworks and remove ice from screens as it formed.

Another cold weather peril at salmon hatcheries is the possibility of unhatched eggs freezing in the hatching troughs. This problem has largely been taken care of by the installation of furnaces.

Constant attention on the part of hatcherymen prevented any abnormal losses of young salmon during the cold spell.

Salmon Return to Yamhill River

Discovery of 44 adult silver salmon in the Yamhill River system this Winter has stimulated hopes of the Oregon Fish Commission for establishment of a permanent silver run in that system.

Silver salmon bearing the Yamhill mark have been reported from several other points in the lower Columbia River drainage this year. Four turned up at the fish Commission's Sandy hatchery. Another three were among silver salmon salvaged at Oswego Creek last Fall.

Spawning Escapements Increase

Spawning ground counts of silver salmon on 82 miles of representative areas in 14 Oregon coastal streams were completed by State Fish Commission biologists in January. They report that silver salmon escapements this Winter were higher than parent run escapements in 1953 in 12 of the 14 rivers where counts were made.

Both the Necanicum and the Yaquina Rivers showed increases of more than 400 percent above the 1953 counts. Silver salmon escapements in 10 other streams this Winter ranged from 30 to 300 percent higher than 1953 counts.

Last Winter the Fish Commission conducted a study at Tenmile Lake and estimated that 77,000 silver salmon entered the system. This year's Tenmile run was roughly 67,000 fish, or 86 percent of the run of last year. This year's Tenmile silver salmon run had a higher percentage of jack salmon than the run last year.

Salmon Survival Tests

The Oregon Fish Commission announced recently that information will be sought in tests this Winter to determine which have the best chance to reach spawning age—hatchery-produced salmon or fish that grow to migration size under normal stream conditions.

The first phase of the tests will consist of fin-marking stream-produced silver salmon as they move downstream through a fingerling collection system at the weir located at Gnat Creek, east of Astoria. Equal numbers of juvenile silvers bearing a different fin-mark will be trucked from nearby Big Creek salmon hatchery and released.

Hatchery Improvements Made

A \$28,500 addition to the Ox Bow salmon hatchery near Cascade Locks has been completed, and includes five large concrete ponds for holding adult salmon prior to spawning. This hatchery is primarily a fall chinook salmon producing plant.

At the Fall Creek salmon hatchery 27 miles east of Waldport, three major additions were completed recently. The rearing capacity for fingerling salmon and steelhead has been doubled, and another large pond designed for holding adult fish until ready for spawning will also be used for rearing small fish at certain times of the year.

California Tuna Fishermen Get More Money for 1956 Catches

Payments to Southern California tuna fishermen rose by a substantial margin last year. The San Pedro and San Diego clipper, purse seine and albacore fleets received more than \$42,000,000 for 106,000 tons of raw tuna. In 1955, payments totaled \$39,000,000.

An all-time tuna production record in 1956 was set by Southern California canneries, according to recently released figures. The California Fish Cannery Assoc. reported that nearly 10 million cases were packed last year at Terminal Island and San Diego. This was approximately one and a half million cases above the 1955 level. Value of the 1956 production is estimated in excess of \$115,000,000.

Tuna Clipper Goes Aground

The 391-ton, \$375,000 San Diego tuna clipper *Leopa C.* struck a reef on Isabella Island in the Galapagos Island area on February 12 and was destroyed, according to word received by the owner, Joseph Penacho of San Diego. Lost with the clipper were 120 tons of tuna.

Twelve crew members were taken aboard the nearby tuna clipper *Chicken of the Sea*.

Sardine Season Closes

San Pedro's sardine fleet closed one of its less prosperous seasons on February 1, as high winds and rough seas prevented much large scale net-setting, though many schools of sardines were reported near to port.

For the 1956-57 season the 60-odd boats showed a total of 23,400 tons of sardines, far below the 56,630 tons taken during the 1955-56 season. For the whole coast south from San Francisco this year, only 31,100 tons were landed, as compared with 73,580 tons last year.

Cannery Closing Postponed

According to Paul Copeland, temporary closing of the Van Camp cannery at San Diego on February 8 was postponed until the 15th. Copeland said the catches of the tuna clippers *Dominator* and *Endeavor* and that of the *Sun Europa* would be processed before the company ceased operations.

John Zitco, procurement officer of the Star Kist Food Co., said that the Company's Plant 5 at Roseville will continue to purchase albacore throughout the entire 1957 season, but no decision has been reached as to resumption



"Arline F", 42' x 13' x 5' combination seiner and albacore boat owned by Darrell Foreman of Costa Mesa, Calif. She is equipped with a 6-71 General Motors Diesel with Mod. 36, 3:1 Western gear driving a 36 x 30 five-blade Federal propeller. She also has an 8 hp. American Marc auxiliary Diesel, Brunner ice machine, Marine Products bait and bilge pumps, Raytheon indicating and recording "Fathometers", Bendix automatic pilot and Danforth anchor.

of packing operations. The albacore unloaded at the wharf is to be trucked to the Star Kist cannery at San Pedro.

The Westgate-California Tuna Packing Co. will be the only cannery operating through the year. President James B. Lane said only lack of fish would prevent the plant from continuous operation throughout 1957.

Man-Eating Shark Landed

A great white man-eating shark was harpooned and brought into Moss Landing last month by Harold Snow and Stanley Haskin on the *Snowcrest*. The creature, largest ever seen in this area, was 17 ft. long and weighed 2820 pounds.

The two men had a couple of harmless basking sharks in tow when the man-eater appeared and started tearing great chunks out of the catch. Jack Daniels on the crab boat *White Angel* nearby was called by radio and hit the mammoth shark with an accurately thrown harpoon.

Unload Tuna at New Avila Cannery

Two San Diego tuna clippers, the *Commander* and *Seafarer*, delivered 680 tons of tuna to the new cannery of the Pauley Processing Co. at Avila on February 20. Avila is a small port north of San Luis Obispo.

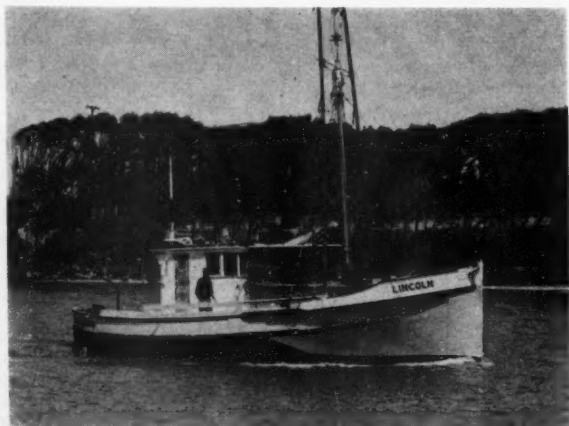
The two clippers are owned by Al Davies of Tacoma, Wash. It is reported that these clippers will continue to serve the Avila cannery.

Case Named Chairman of Fiesta

Mason Case, manager of the San Pedro Fishermen's Cooperative, has been named as chairman of the 1957 Fishermen's Fiesta. Case, who served as vice-chairman of the event last year, has been general manager of the Co-op since 1954 and previously was a fish canner in Monterey.

RCA Expands Sales Operation in San Francisco

Expansion of the RCA "Radiomarine" sales operation in San Francisco, to provide boat owners with speedier, more effective sales and technical services on RCA electronic marine equipment and systems, has been announced. C. D. "Jim" Pitts, formerly field sales representative for RCA Commercial Electronic Products in



The 44' "Lincoln", schooner-type troller and crab boat owned by Fred Sandness of Carmel, Calif. Built in 1925, the vessel's home port is Moss Landing, Calif. Her equipment includes 110 hp. Mack Diesel, Kaar radio and direction finder, Bendix depth sounder and Wood Freeman automatic pilot. The vessel's hold capacity is 10 tons, and she has 6 spool Kolstrand salmon trolling gurdies, operated from the main engine.



The 25' x 9' x 2½' "Arlene M.", used for shellfishing and taking out fishing parties. She is owned by Capt. George L. Meech of Mystic, Conn., and is equipped with a 45 hp., Model LH-4 Lathrop engine which gives her a speed of 7 mph. She uses Esso products, carries Columbian rope and a 12-pound Danforth anchor. The craft was built in Stonington, Conn. in 1939.

Washington, D. C., has been advanced to Manager, "Radiomarine" Sales, San Francisco District. The RCA "Radiomarine" sales office is located at 1075 Folsom St., San Francisco.

Tuna Contracts Signed

The final tuna contracts affecting San Pedro boats were signed on February 2 between the Fishermen's Cooperative and the Star-Kist and Pan Pacific canneries. An indefinite extension of the 1956 contracts is provided.

The pact calls for payment of \$270 a ton for yellowfin and \$230 a ton for skipjack. Altogether about 100 San Pedro tuna boats are covered by the contracts now in force.

Vessels Sold

Vernon Baird has purchased the *Prelude* from William Athow, who recently moved to Olympia. William Baird will operate the boat out of Moss Landing. The *Sharon*, sister ship of the *Prelude*, has been sold to Anthony and Herman Botelho of San Juan Battista.

The salmon boat *Sea Star* was purchased by Ole Beck of Salinas from Leonard Shirrell of Castroville.

Big Demand for Tuna During Lent

The tuna industry anticipates that 2,000,000 cases of canned tuna will disappear from store shelves in the 40 days before Easter. Cannery men are promoting this demand by cooperating in a joint drive of the Tuna Research Foundation, Macaroni Manufacturers and the Carnation Company.

Connecticut Bill Would Exempt Fishermen From Taxes on Boat Equipment

Stonington fishermen were well represented at a recent legislative hearing in Hartford on a bill which would exempt fishing boats from taxation on certain equipment. The legislation was introduced to give the fishermen the same exemption as is granted to farmers on equipment used in the pursuit of their business.

A large delegation from the Southern New England Fishermen's Association attended the hearing, with Capt. Israel M. Jacobs, business manager, as the spokesman. After hearing testimony, the joint House and Senate Finance Committee reserved decision on any recommendation.

Long Island Menhaden Firm Acquires New Property

The dock, store and boat basin at Promised Land, as well as the land on which the plant stands, have been sold to their next door neighbor, the Smith Meal Co., of which Gilbert P. Smith of East Hampton, L. I. and Coral Gables, Fla., is the head. Many years ago this property belonged to the late Joshua B. Edwards of Amagansett. In 1916 a company was formed—Edwards Brothers, Inc., to operate the dock and boat basin and actively engage in fishing. This business operated until 1942 when the firm ceased active fishing as a corporation. However, they continued to handle fishing supplies and operated the dock, with Frank Smith of Amagansett as manager.

Landing Good Fluke Catches

Two boats, the *Robert E.* and the *Edith L. Hutchins*, which formerly operated from the dock at Promised Land, are now operating from Gosman's dock on Lake Montauk and bringing in good catches of fluke, from the "Gully". The week of February 3rd produced the heaviest catches of commercial fish for that week in several years.

Besides the 311 boxes of commercial fish shipped, mostly fluke, the draggers brought in 1200 pounds of lobsters.

Griffin Named Detroit Diesel Distributor

Harry J. Hush, president of Griffin Equipment Corp., New York City, has announced that his firm has been appointed exclusive territorial distributor for marine engines of the Detroit Diesel Engine Division of General Motors Corp. Griffin's territory is the Greater New York Metropolitan area, including New York City, all of Long Island, Southern New York State and the northern half of New Jersey.

Distribution of Pacific Albacore Influenced by Water Temperatures

Distribution of the Pacific albacore—source of choice white-meat tuna—is influenced by water temperatures and a food boundary. So report the two Fish and Wildlife Service research vessels—the *Manning* and the *Gilbert*—which have completed Fall surveys in the broad Pacific, verifying data which had previously been assembled.

It seems that water colder than 57 degrees has no appeal to the albacore. In hundreds of miles of experimental fishing, temperature-taking and water sampling, the crews of these vessels could find no albacore on the cold side of the "isotherm"—the meandering, unstable line along which the temperature is 57 degrees.

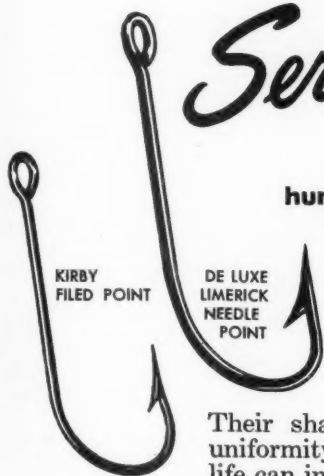
Likewise, the researchers verified information that the albacore stays above the "thermocline", an imaginary sheet which separates the warm waters of the surface from the very cold waters below. The thermocline is sometimes only a few feet down and sometimes 200 feet or more below the surface.

The third limit to the distribution of albacore—the "food boundary"—is the barren water where few of the microscopic animals which are the basis for fish food exist. This boundary sometimes can be recognized by the color of the water and sometimes only by scrutinizing samples of the water with a microscope.

To the men in the albacore boats, such findings are important. Showing the albacore fishermen where not to look can make the difference between well-utilized hours and a lot of wasted time spent in seeking fish.

PFLUEGER HOOKS

Serve you Better!



KIRBY
FILED POINT

DE LUXE
LIMERICK
NEEDLE
POINT

hundreds of different
types and sizes
regularly
stocked

O'SHAUGHNESSY

Their sharper points, their greater uniformity of temper, and their longer life can increase your fishing success. Ask your supplier, or write.

THE ENTERPRISE MFG. CO., AKRON 9, OHIO

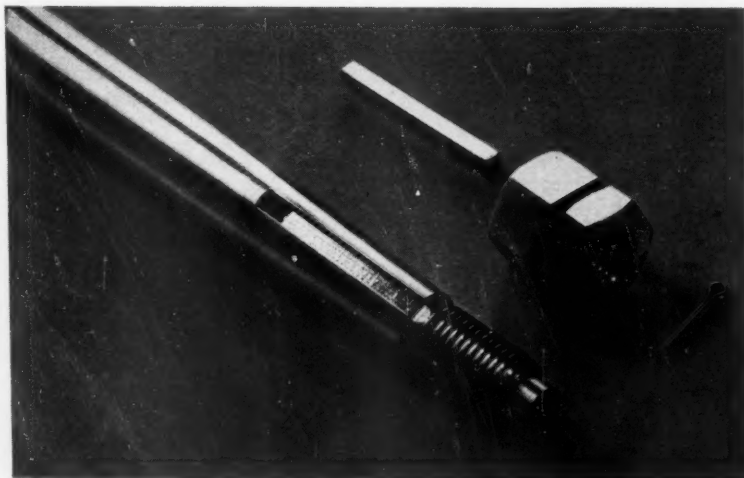


PFLUEGER

(Pronounced "FLEW-GER")

A GREAT NAME IN TACKLE

GET DEPENDABLE POWER TRANSMISSION WITH TOBIN BRONZE SHAFTING



FIRST CHOICE FOR OVER 70 YEARS. Here's why Tobin Bronze*, an exclusive Anaconda product, has led the field among boatbuilders and boatowners for dependable propeller shafting. It is manufactured by special rolling processes which impart to this highly corrosion-resistant alloy an unusual combination of tensile



maintain stocks for prompt service.

Look for this trademark.

Tobin Bronze Shafting is available in lengths and diameters that will meet practically all requirements for pleasure and commercial craft. Anaconda distributors maintain



For high speed, heavy duty. Tempaloy* Shafting — a corrosion-resistant aluminum bronze — combines exceptional strength and toughness with high resistance to shock, and is used for

high-speed and heavy-duty work which requires maximum shaft strength and toughness with relatively light weight.

*Reg. U. S. Pat. Off.

strength, fatigue resistance, toughness and high yield strength. Yet it will compensate for sudden jars from driftwood that might otherwise damage bearings and housings. For more information, see your Anaconda distributor, or write: The American Brass Company, Waterbury 20, Conn.

54127

ANACONDA® MARINE BRASS AND BRONZE

MARCH, 1957 - NATIONAL FISHERMAN



Myron L. Bloom, recently elected president of Gloucester Fisheries Association. He is general manager of the O'Donnell-Usen Fisheries Plant at Gloucester.

Gloucester Fishery Laboratory Gets Approval of House

The U. S. House of Representatives has approved a \$300,000 grant for a Fishery Technological Laboratory at Gloucester. Next to consider the appropriation will be the Senate Appropriations Committee, and then the Senate.

The following comment was made by Mayor Corliss regarding the House action: "One of the best things that could happen for Gloucester will be the establishing of a Fisheries Technological Laboratory and Vessel Base. Such a laboratory will be a tremendous aid to the fishing industry. It will open up new fields and give greater knowledge regarding our present art of fishing. The laboratory will also employ some 40 men, and we should not overlook the stimulation and interest it will create in our local youth to participate in the fishing industry."

Two Fishing Vessels Go Down

The 31-year-old, 81-ft. Gloucester dragger *Helen M.* sprang a leak last month and went to the bottom in 50 fathoms of water. Her skipper, Capt. William T. Lumbruno and crew of seven, were picked up by the Gloucester dragger *Rose and Lucy*.

Ironically, the *Helen M.* was one of the boats that had just recently received a government loan to take care of vessel repairs and improvements. The loan was for \$19,500, and was to be paid about a week after the vessel was lost.

The second vessel to go down last month was the 104-ft. *Alden*, which burned to the water's edge after a fire started. Two of her four fuel oil tanks blew up after the crew escaped. The men were picked up by the *St. Terese*.

The *Alden* was in command of Capt. Anthony P. Aiello and carried a crew of five. In her earlier days the *Alden* was one of the foremost mackerel producers in Gloucester. In recent Summers, she has been one of the highliners of the menhaden seining fleet.

Fishery Leaders Visit Gloucester

Ross L. Leffler, newly appointed Assistant Secretary of the U. S. Dept. of the Interior, and Arnie J. Suomela, director of the Bureau of Commercial Fisheries, were in Gloucester late last month. Mr. Leffler revealed that the Fish & Wildlife Service is considering locating its regional headquarters for the North Atlantic in Gloucester.

The two men visited the O'Donnell-Usen Fisheries Plant on Commercial Street as well as Gorton's of Gloucester and the Quincy Market Cold Storage & Warehouse Co. They also met with the Gloucester Fisheries Commission and vessel owner Lawrence C. McEwen, chairman of a group associated with a joint committee of Massachusetts men concerned with aiding in solution of New England's commercial fisheries problems.

After leaving Gloucester the two men were to go to Boston to inspect fisheries operations there.

New England Fisheries Technologists Discuss Quality Improvement

Progress made toward a new set of sanitation regulations for Massachusetts fishing vessels and shore plants was outlined by Fred Wilbour, Chief of the Massachusetts Division of Marine Fisheries, at the February meeting of the New England Fisheries Technologists in Boston.

Also speaking at the meeting was Isaac Camber of the University of Miami, who discussed the use of sodium bisulphite in preventing black spot in shrimp. He indicated experiments at the University of Miami Laboratory have been successful.

Dr. Alex S. Malaspina of Chas. Pfizer and Co., manufacturers of Biostat, a terramycin antibiotic, explained experiments by his firm on the use of terramycin for preserving freshness of fishery products. He pointed out that Canada is expected to accept the use of terramycin in fishery products in the near future.

It was brought out by Dr. Carl Fellers, head of the Food Technology Department, University of Massachusetts, that a fisheries school had been set up three years ago by the trustees of the University, to train students in the field of fishery technology. Up to this time the principal interest has been from graduate students. Dr. Fellers will soon take a 6-months' sabbatical leave to survey industry, Federal, and State fisheries groups to determine the need and interest in this fisheries technological school.

Joseph Pileggi, Chief of the Market News Section of the Fish and Wildlife Service at Washington, outlined some of the latest developments in the revised program under the Fish and Wildlife Act of 1956. The fisheries technologists viewed two new films—"Automation in the Fish Stick Industry" and "Fish and Wildlife Exploratory Fishing".

Fisheries Convention in Chicago To Feature Customers' Day

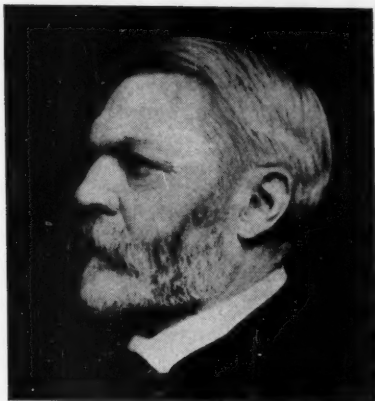
Customers' Day will initiate the regular sessions of the National Fisheries Institute's Twelfth Annual Convention, Robert J. Gruber, chairman, has announced. The convention, to be held at the Edgewater Beach Hotel, Chicago, April 28 through May 1, is expected to attract about 800 members of the fishing and allied industries. Convention Chairman Gruber is president of Fishery Products, Inc., Cleveland.

The special day devoted to members of the National Fisheries Institute and their customers—April 29—will begin with morning sessions, followed by a Customers' Luncheon, during which products of industry members will be served. Guest luncheon speaker will be Keen Johnson, vice-president of the Reynolds Metals Co., Louisville.

Morning sessions will cover the wholesale distribution of fishery products, with the spotlight focused on the fish wholesaler—his operation, policies, customers and his outlook for the future. The program will be divided into three phases, each of which will be demonstrated with a skit.

Taking part in these sessions will be D. M. Haywood, manager of Freeman Certi-Fresh Foods, Los Angeles, who will review the fresh fish and shellfish phase; E. W. Williams, publisher of "Quick Frozen Foods", who will speak on frozen fish and shellfish; and Sam M. Vogel, Vogel's Inc., Little Rock, Ark., who will talk on the part merchandising plays. During the day, a "Boulevard of Brands" will exhibit members' brands and packages.

Other features of the convention will include a Trade Show on April 28, workshop sessions, speeches of international importance and the annual election of officers. A dinner dance will close the convention.



The man who wouldn't give up

500 MASSED ROCKETS shook the brand-new Brooklyn Bridge, screamed up into the May evening and showered the city with red and gold.

While behind a darkened window, a big, gaunt man sat and watched, too crippled and pain-racked to attend the opening day festivities for the bridge.

This was a pity, for he had built it.

Which means that when money gave out, Chief Engineer Roebling pleaded for more. When disturbing changes of plan had to be made, Roebling fought them through. And when a hundred panicked men were trapped under the East River in a flooded caisson, Roebling saved them.

Spinning the giant steel spiderweb not only exacted 13 years of Roebling's life, from 1870 to 1883, but very early in the game it crippled him forever with the caisson disease.

But he never gave up, saw the job through to the end. His were the courage, skill and vision that make Americans a nation of great builders—a strong, growing nation. And a nation whose Savings Bonds rank with the world's finest investments.

For the constructive strength of 168 million Americans stands behind these Bonds. This is why, when you buy U.S. Savings Bonds, our Government can absolutely guarantee the safety of your principal—up to any amount—and the rate of interest you receive.

You cannot get a better guarantee than that. Why not invest in U.S. Savings Bonds regularly—where you bank or through the Payroll Savings Plan where you work? And hold the Savings Bonds you have.

Safe as America—U.S. Savings Bonds



The U.S. Government does not pay for this advertisement. It is donated by this publication in cooperation with the Advertising Council and the Magazine Publishers of America.

Florida-Based Fishery Research Vessel To Study Shrimp Net Behavior

A major activity this year at the Gear Research and Development Station, located at Miami, will be systematic studies of shrimp trawling gear. The *George M. Bowers* will be used to conduct experimental fishing operations in Florida and Gulf of Mexico waters, with underwater television and divers with camera gear to observe and record the operational characteristics of representative types of commercial shrimp trawling gear in use in the Southeastern shrimp industry. Studies will be made of the behavior of the nets, trawl doors, towing cables, floats and other accessory gear under various towing speeds and fishing conditions.

Attempts will be made to record the reaction of shrimp and fish to capture by the trawls.

Shrimp Fleet Blessed

A crowd estimated at between 7000 and 8000 were on hand at Fort Myers Beach on February 17 to take part in the Beach Day activities of the Edison Festival of Light. The main event of the day was the blessing of the shrimp fleet, which was conducted by Rev. Richard L. Brown, Church of the Good Shepherd, Lake

Wales, and Rev. Edmund Sills, St. Raphael's Episcopal Church, Fort Myers Beach.

The following shrimp vessels were blessed during the ceremony: *John Lawrence*, *Miss Punta Gorda*, *Ike*, *Jeanie B. March*, *Little Tom*, *Laura E.*, *Ginger B.*, *Lady Lillian* and *Sea Pilot*. More than 40 smaller boats also received the blessing.

Marine Laboratory Bill

Senator Holland has introduced a bill to provide for the construction of a fish and wildlife marine laboratory and experiment station in the Gulf Coast area of Florida. A similar bill, except that Naples, Florida, is specified as the location of the laboratory, has been introduced in the House.

Deep-Water Shrimp Trawling

During the period of January 8 to February 6, the exploratory fishing vessel *Combat* continued deep-water shrimp trawling activities along the Florida coast between St. Augustine and Stuart, and along the northern side of Little Bahama Bank. Successful 3-hour drags caught red shrimp at rates of 178 pounds, heads-

on weight. The best single catch yielded a total of 650 pounds of heads-on shrimp.

Trawling also was carried out from off New Smyrna Beach to Stuart. At this time catches in the New Smyrna area averaged 249 pounds of heads-on shrimp per drag. The highest catch south of Cape Canaveral contained 105 pounds of red shrimp.

Highest concentrations during this period centered in the Daytona Beach to New Smyrna area. Six 3-hour drags on February 4-5 caught 1470 pounds of heads-on red shrimp.

Oysters Harmed by Drought

According to reports from Florida State University scientists, years of drought and the increasing saltiness of waters of the Gulf of Mexico are harmful to Gulf oysters.

Drought and differences of currents caused by man-made changes in the coastline tend to increase the saltiness of the water around the oyster reefs. This in turn allows many of the oysters' natural enemies to move in to areas where the water was once much fresher.

Almost no oysters are now found around the once oyster-rich St. Vincent's Bar in Apalachicola Bay. Instead the Gulf oyster drill, stone crab and common conch, natural enemies of the oyster, now thrive there.

It is believed that small oysters growing on the reefs are killed by snails, stone crabs and other predators, while large oysters transplanted and protected there are killed by a fungus parasite. In areas where there is more fresh water, oysters receive natural protection from the worst of the predators and parasites which require higher salinities.

Harbor Improvements

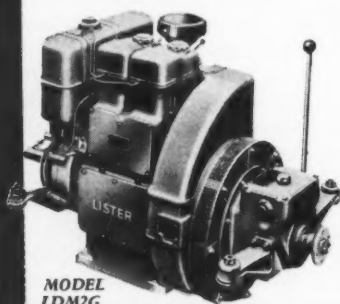
The sum of \$19,700 has been designated in President Eisenhower's budget for a survey of shrimp boat harbor improvements at Fort Myers Beach and Naples, and \$5,000 for a beach erosion study at Fort Myers Beach.

Plans call for a channel 15 ft. deep and a jetty at Fort Myers Beach; a jetty-protected channel 14 ft. deep through Gordon Pass and a connecting channel 12 ft. deep to upper Naples Bay.

Find Shrimper's Water Tank

On February 11, the water tank from the shrimp trawler *Crisp Wilkinson*, out of Fort Myers Beach, was picked up by the *Helen Mae*, shrimp trawler out of Port Isabel, Texas. The *Crisp Wilkinson* was owned by Shaw Shrimp Co. of Fort Myers Beach, and was last heard from on January 18. Two men were listed as aboard her—Capt. Sam Meier and crew member Julius Mogyorossy. Meier's home was in Corpus Christi, Texas, while Mogyorossy was known to have come from New York State.

AIR-COOLED SMALL DIESELS



MODEL
LDM2G
2 cyl., with direct reversing gear

BY **Lister**

Husky, Long-Life Engines
You've Long Waited For!

**DIESEL SAFETY,
SIMPLICITY, ECONOMY**

★

PROPULSION POWER

For Medium Sized, Medium Speed Boats

AUXILIARY POWER GENERATION

For Any Boats

Underwriters' Approved for Below-Decks Operation. Built to Lloyd's requirements.

MODEL LDM-1.

1 cyl. *3½ HP @ 1800 RPM. Only 24½" high, 19" wide

MODEL LDM-2.

2 cyl. **7 HP @ 1800 RPM. Only 28" high, 20¾" wide

*5 HP Gross Rating **10 HP Gross Rating

Immediate starting, complete air-cooling, in temperatures from sub-zero to 130°. Surprisingly low weight per horsepower. Unbelievably quick, easy installation. Parts and service in principal ports. Lister Engines (3½ to 600 HP) provide auxiliary diesel power for

over three quarters of New England's fishing fleet and countless craft, coast-to-coast and the world over.

Write for complete data and name of nearest dealer. Distributorships available in some areas.

HONEST
HORSEPOWER
THAT
REALLY DELIVERS
EVEN AT LOW RPM!

LISTER-BLACKSTONE, Inc.

42-32 21st Street, Long Island City 1, N. Y., Tel.: Stillwell 6-8202

South Carolina Shad Season Opens

The shad fishing season opened February 1 and will continue until March 25 in the lower 40 miles of all rivers, and until April 20 above the 40-mile point. Fishing with skim bow nets for non-commercial purposes is allowed on the Black River until May 1.

Commercial fishing is prohibited from noon Friday to noon the following Tuesday, except that in Game one Zone Seven the closed period is from noon Saturday to noon Tuesday. Counties in Zone Seven are Georgetown, Horry, Marion and Dillon.

May Develop Seed Oyster Business

Growth of an oyster seed business for South Carolina to supply needs for disease-resistant oysters which could be raised in more northern waters of the United States, is seen as a possibility by G. Robert Lunz, Director of Bears Bluff Laboratory, Wadmalaw Island.

For some reason South Carolina oysters are most prolific, actually surpassing the needs of oyster fishermen. So, Mr. Lunz sees an economic value in raising seed oysters and shipping them to northern waters.

Draggers Join Atlantic City Fleet

(Continued from page 17)

The fo'c's'le contains nine built-in bunks with locker space under the lower bunks on either side. There is a Shipmate No. 1035 oil-burning stove and a Monel sink with galley pump. Additional locker space is provided under the counter tops alongside the sink and stove, and there is an 800-gallon fresh-water tank. The captain's quarters aft of the pilot house contain a built-in bunk, with two drawers beneath it.

"Sylvia A." Is First 60-Footer for North

The *Sylvia A.* is the first 60-foot North Atlantic dragger built by the Morehead City Shipbuilding Corp. Previous draggers delivered by the shipyard to Northern fishermen were in 68 and 55-foot lengths.

The *Sylvia A.* is powered by a General Motors 6-110 Diesel turning a 48" x 44" 4-blade Southerner propeller wheel through a 4½:1 reduction gear. She is equipped with a 3000-watt Onan Diesel generator with tail shaft driving a Jabsco pump. On the front of the engine is another Jabsco pump. There are two 1050-gallon fuel tanks and a 60-gallon lube oil tank in the engine room.

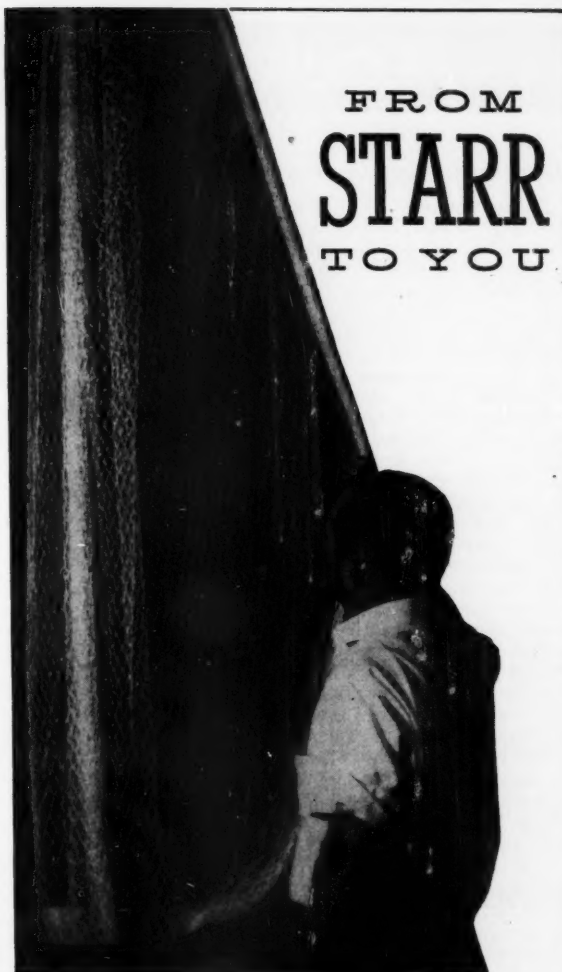
Electronic equipment on the *Sylvia A.* includes an APN-9 Loran unit, a 150-watt Ray Jefferson Model 914 radiotelephone, and a Raytheon "Fathometer" Junior depth recorder. On deck is a Hathaway Model 1353 hoist. Two 4" gallows frames, complete with deck blocks, are mounted on the starboard side of the boat.

In the fo'c's'le of the *Sylvia A.* are six built-in bunks with locker space under the lower bunks. There is a Shipmate Model 1035 oil-burning stove and a stainless steel sink with galley pump. Additional locker space is provided on either side of the sink under the counter top. There is a 300-gallon fresh-water tank.

The captain's quarters contain a built-in bunk with two drawers underneath. A 14" brass port light is mounted on the port side of his quarters. Dutch doors are installed on both sides of the pilot house. There are four 5" brass port lights, two on each side, mounted in the steel trunk cabin under the pilot house.

On both the *Angie and Irene* and the *Sylvia A.*, there are two banks of four Surrette batteries each. The batteries are wired so that either bank, or both, can be charged from the engine generator or from the auxiliary generator. The main engine can be started from either or both banks. On the *Angie and Irene*, a voltmeter is installed in the pilot house, to indicate the voltage in each bank of batteries. The *Sylvia A.* has a voltmeter in the captain's quarters.

The fish hold on both the *Angie and Irene* and *Sylvia A.* is divided into 10 bins with matching pen boards.



FROM
STARR
TO YOU



The finest netting you can buy —
Nylon netting made only from
100% highest tenacity DuPont Nylon...
Processed into perfection by STARR,
the country's first volume producers
of nylon netting.

STARR NET — STAR PERFORMANCE

A. M. STARR NET CO.

EAST HAMPTON, CONNECTICUT

EQUIPMENT and SUPPLY NEWS

Norseman Marine Has "Nordberg" Engines

The formation of Norseman Marine to manufacture Nordberg gasoline marine engines has been announced by Ralph G. Klieforth of Oshkosh, Wis., chairman of the new firm. In addition to Mr. Klieforth, the administrative staff of Norseman Marine includes: Clyde C. Smith, Sales Manager; J. W. Meerdink, Chief Engineer; Allen Hesse, Export Manager; Virgil Bean, Quality Control Engineer; Jim Youngworth, Advertising and Sales Promotion Manager; Louis Carpenter, Treasurer and Comptroller; and Louis Grill, Electric Power & Light Plant Division Manager.



Ralph G. Klieforth

Harry Griswold of the Nordberg Manufacturing Co. of Milwaukee will continue supervisory responsibilities with Norseman Marine as Chief Sales Engineer. Norman Wuotila will continue as Service Manager and Dave Graham will continue as Eastern District Sales Manager.

The complete "Nordberg" line, consisting of the 155 hp. Knight, 130 hp. Tarpon, 110 hp. Marlin, 110 hp. Bullet, 105 hp. Bluefin, 95 hp. Arrow, and 60 hp. Colt, is now being volume-produced in Oshkosh. Distribution in all important areas throughout the United States, Canada, Latin America and overseas will continue to be handled by established Nordberg dealers.

Republic Steel Catalog on Fishing Chain

A twelve page two-color catalog describing marine and fishing chain has just been published by the Bolt and Chain Division of Republic Steel, Cleveland, Ohio. Various types of welded chain, welded chain assemblies and fittings applicable to both the commercial fishing and marine industries are listed. The catalog is attractively decorated with sketches of ships and fishing scenes.

The new Republic marine and fishing chain catalog is available from any of Republic's district offices, or copies may be obtained direct from the Advertising Division, Republic Steel, 3100 East 45th St., Cleveland 27, Ohio. Ask for form number ADV-764.

Vernon, Roebling Product Sales Manager

Douglas W. Vernon has been named product sales manager for wire rope and aircord by John A. Roebling's Sons Corp. Vernon, formerly vice-president and general manager of the Leschen Wire Rope Division of the Watson Stillman Co., assumed his new duties on February 1. His office is located at Roebling's main plant in Trenton, N. J.

Prior to joining the Leschen organization in 1945, Vernon had been employed by Roebling for more than 23 years. He entered the firm's Chicago district office in 1922, and was named assistant district manager in 1939. Transferred to Trenton in 1942, he worked in the purchasing department, and a year later was made assistant to the general manager of sales.

Gray Marine Names Bartlow Chief Engineer

Appointment of Jack R. Bartlow as chief engineer of Gray Marine Motor Co. has been announced. Mr. Bartlow, who joined the organization in 1955, has a background of experience in the development of high-output marine engines, including commercial types. His staff will include

Gray's designers and draftsmen, as well as the men in the experimental test department.

Gray builds gasoline and Diesel marine engines in the range from 25 to 200 hp., and has a policy of continuous development work for product improvement, and new products. In support of this policy, the Gray Engineering Department maintains a fleet of seven test boats, of varying sizes and types. Orion W. Meiselbach is Gray's vice-president in charge of engineering.

Burmeister & Wain Buys Lathrop Engine

Burmeister & Wain American Corp. of New York has announced the purchase of the physical assets of The Lathrop Engine Co. of Mystic, Conn., as well as the properties it occupies.

The plant will operate under the name of Burmeister & Wain American Corp., Lathrop Engine Division. Founded in 1897, the New England company is one of the oldest marine engine manufacturers in this country. The new owners intend to draw on their vast experience in the marine field in order to improve further the Lathrop line of marine engines.

Burmeister & Wain American Corp., which will make its headquarters in Mystic, is a wholly owned subsidiary of Burmeister & Wain, Denmark's biggest industrial enterprise, now in its 114th year of continuous activities. The firm hopes through this expansion of its American subsidiary to strengthen further its service to the fishing boats operating with Burmeister & Wain Diesel engines.

The New York office of Burmeister & Wain American Corp. will be maintained at 17 Battery Place for the convenience of its customers.

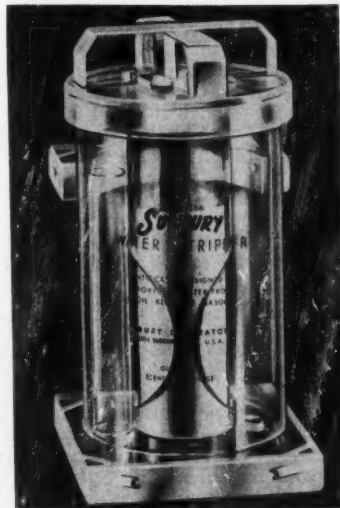
Columbian Bronze Promotes Neilsen

The appointment of E. Paul Neilsen as Divisional Sales Manager of Columbian Bronze Corp., Freeport, N. Y., has been announced. Mr. Neilsen, a graduate of Pratt Institute, has served Columbian since 1942 as a sales engineer in all phases of the company's operations.

As a Divisional Sales Manager, Mr. Neilsen will be responsible primarily for sales and promotional activities in the fields of motorship propellers, original equipment manufacturers, and export. His appointment is in keeping with the large-scale expansion program recently commenced by the Columbian Bronze Corp.

Sudbury Unit Removes Water from Fuel

Diesel fuel users who have had the experience of power failure due to the presence of water in the fuel tanks will recognize the value of Sudbury Laboratory's new transparent lucite Water Stripper, which is scientifically designed to prevent damage to strainers, filters, injectors, engines, etc. Because condensation, due to atmospheric temperature changes, cannot be prevented from forming in Diesel, gasoline or domestic fuel tanks, fuel can literally become "loaded" with water which must be removed if



Sudbury Water Stripper

serious damage is to be avoided. When water is present in the fuel tank, the combination of fuel and water forms a semi-sulphuric acid condition which actually may destroy parts of the fuel system.

Sudbury Water Strippers are designed as a double-action separator. First, water and impurities are decanted from the fuel because the large cylinder of the stripper reduces the velocity of the fuel and acts as a settling chamber. Flow of fuel through the unit is directed so that most of the water and impurities settle to the bottom of the cylinder. Second, the fuel is forced through a chamois-like filter paper and plastic screen, removing the last trace of water.

Sudbury Water Strippers are made in two basic sizes—Model A with a rated capacity of 20 gallons of light fuel oil per hour, and Model B, designed to handle up to 50 gallons of fuel per hour. However, a Water Stripper to handle any desired gallonage can be obtained through special order to Sudbury Laboratory, South Sudbury, Mass.

Chandler, White Diesel Sales Engineer

H. W. Chandler has been named Sales Engineer in the New England States area for White Diesel Engine Division of the White Motor Co., Springfield, Ohio. Chandler has been active in sales engineering for marine, contracting and general industry for more than eight years. He has served as a direct representative for Diesel manufacturers and engine distributors. His experience and acquaintance has been centered in Boston and New England.

Chandler graduated from the Engineering School of the University of Pennsylvania, and attended the graduate school of Naval Architecture and Marine Engineering at the Massachusetts Institute of Technology. He is a member of the Boston Yacht Club.



H. W. Chandler

Booklet on Molded Fiberglass Boats

A new colorful booklet, "The Fiberglass Reinforced Molded Boat" by Charlie M., presents some of the reasons why Fiberglass boats are a good investment. The pamphlet, published by the Owens-Corning Fiberglass Corp., provides a simple explanation of how Fiberglass boats are made. It also tells why they are virtually maintenance free.

The attractively illustrated, 12-page booklet points out that a Fiberglass hull is a seamless molded piece with no rivets, nails or screws to work loose. Fiberglass hulls require no sanding or scraping, caulking or painting for protection. Furthermore, it is claimed that Fiberglass reinforced plastic used in boat construction today is stronger per pound than wood.

Most of the Fiberglass craft in service today are under 30 feet in length, although there are several boats ranging in length up to 57 feet. It is expected that greater numbers of the larger Fiberglass boats will be produced during the next few years.

A copy of the Fiberglass boat booklet can be obtained from Owens-Corning Fiberglass Corp., Textile Products Division, 598 Madison Ave., New York 22, N. Y.

Chrysler Offers New Catalog

Chrysler Marine Engine Division has just released its catalog for 1957, containing complete specifications and performance data on all eight engines in the marine line, including the two V-8's. Special sections in the catalog detail standard features, optional features and accessories available. A copy may be obtained by writing Chrysler Marine Engine Division, Dept. A, Detroit 31, Mich.

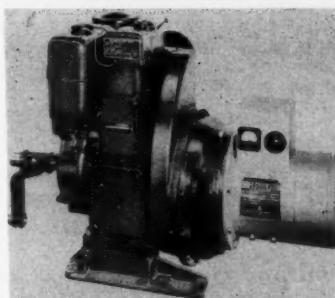
New "Safety-Lister" Diesel Generator Set

Safety Industries, Inc., Industrial Sales Division, New Haven, Conn., announces an improved Diesel-generator set which is especially designed for smaller boats.

The "Safety-Lister" unit incorporates a Lister - Blackstone type LD-1, air cooled, 3½ hp. Diesel engine, rated at 1800 rpm. and a "Safety" direct-connected, 35-volt DC generator available in 1500, 1750 and 2000 watt capacities. The engine is approved by Marine Underwriters for below deck mounting.

The "Safety" generator features a one piece 9½" O.D. formed steel frame, a shielded, pre-lubricated bearing and dynamically balanced armature. It has a frame mounted control box, complete with ammeter, voltage adjusting rheostat and push button starting relay. The brush boxes use "Neg'ator" springs for constant pressure throughout life of brushes.

Modified Epoxy Resin encapsulated field coils, impervious to oil, moisture and acids, assure better heat dissipation and excellent abrasive wear. There is a one piece handhole cover allowing complete accessibility, and cranking winding is available.



"Safety-Lister" generator set.

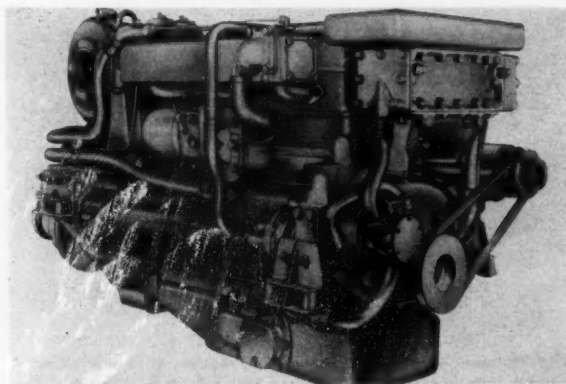
Hercules Offers New Turbo-charged Diesels

Hercules Motors Corp., Canton, Ohio, has introduced three new marine Diesels, which with the present models provide a total of nine different sizes of engines ranging from 15 to 265 hp., in 2, 4, 6 and 8 cylinder sizes. With the addition of the new models, Hercules marine Diesels are now available as natural aspirated, super-charged and turbo-charged engines. The Hercules Diesels are claimed to be very economical to operate.

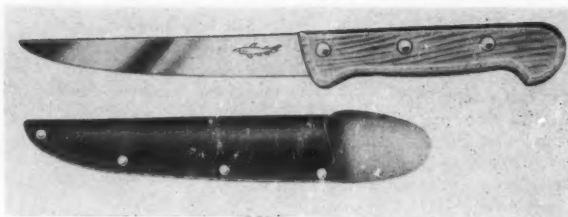
The new Hercules TCD-188M is a turbo-charged 4-cylinder marine Diesel with a 3½" bore x 4" stroke, which produces 105 hp. at 3000 rpm. This model is one of the most compact engines in the field, being 46¾" long, 27 13/16" wide and 22¾" high above C/L. The TCD-188M weighs 950 lbs.

The TCD-283M is a turbo-charged 6-cylinder marine Diesel with a 3½" bore x 4" stroke, and produces 160 hp. at 3000 rpm. This engine is the turbo-charged version of the Hercules DIX6 marine engine. It is 55½" long, 27 13/16" wide and 22¾" above C/L.

The new Hercules DIX-2DM is a 2-cylinder model with a 4¼" bore x 4½" stroke. This 127.5 cu. in. engine produces 30 hp. at 1800 rpm. The DIX-2DM is 36¾" long, 25¼" wide and 21¼" high above C/L.



New 160 hp. Hercules turbo-charged Diesel.



The "Shark" Brand fillet knife, which is handled in this country by R. Murphy Co.

Murphy Handling Shark Brand Fillet Knife

R. Murphy Co., Ayer, Mass., has been appointed United States distributor for the "Shark" Brand fillet knife, which is made of an extremely high carbon stainless steel (Swedish), and will retain keen, sharp cutting edges. This stainless steel fillet knife is available in two sizes—5½" and 8½". The 8½" size may be of considerable interest to the commercial fisherman. A leather blade sheath is provided for the 5½" size.

New Treated Tubbs Rope Resists Rot

A new type of manila anchor and mooring rope, treated with preservative to protect against mildew, rot and marine growth, has been introduced by Tubbs Cordage Co., 200 Bush St., San Francisco, Calif. Manufacturer's tests have proved that the preservative-treated Tubbs rope will resist the deteriorating effects of mildew and rot under the most severe conditions of use and storing.

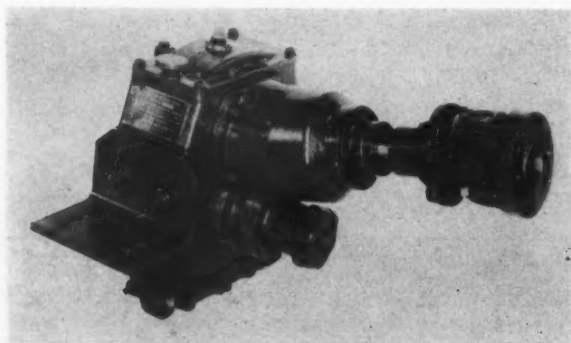
The new Tubbs anchor and mooring rope conforms to U. S. Coast Guard Specification 21R4A and to Military and Navy Department Specification MIL-R-16060 (ships) for first grade manila rope, preservative-treated. The rope is offered in all sizes, in full and half coils.

Walter V-Drive Saves Space

The Walter V-Drive is suitable for use in a variety of craft ranging from 16' workboats to twin-engine trawlers. The advantage of using the V-Drive is that it permits installing the engine in the extreme aft of the boat, thus providing more cargo and cabin space. The engine compartment becomes a compact unit and can be bulkheaded from the rest of the boat, reducing engine noise and increasing safety.

The Walter V-Drive is made in various ratios and sizes. It is very quiet in operation because of its helical gears, which are made of the finest alloy steel, specially finished and heat treated.

For free illustrated catalog, write to: The Walter Machine Co., Inc., 84 Cambridge Ave., Jersey City 7, N. J. The Company also manufactures reduction gears, transfer drives, Clean-Flo keel coolers, and propeller pullers.



The Walter V-Drive, which is made in various ratios and sizes. It permits installing the engine in the extreme aft of the boat, thus providing more cargo and cabin space.

Boston Fish Landings For Year Show Gain

Landings at the Boston Fish Pier in 1956 were 8 percent greater than in 1955, due to increases in production of all sizes of haddock and cod. The more substantial increases were for large haddock and large cod. Cusk, sea dab, swordfish, and wolf fish landings also increased, while the remaining items were landed in lighter volume.

More production and higher prices in 1956 caused a 14-percent rise in the total ex-vessel value for Boston fishery landings, as compared to the previous year. Higher ex-vessel values were recorded for landings of all the major species, except ocean perch, which declined 12 percent. Haddock value was up 16 percent and scrod haddock value was up 18 percent.

Large haddock and scrod haddock combined in 1956 accounted for 72 percent of the total landings at the Boston Fish Pier, slightly higher than in 1955. About an equal amount of each size was landed. This is the second straight year that the landings of large haddock increased, evidence of the effectiveness of minimum mesh regulations in the North Atlantic haddock fishery.

Explosion Destroys Seiner "Demand"

A terrific explosion ripped the 85-ft. fishing vessel *Demand* to pieces last month and smashed all the windows of a nearby four-story refrigerating plant on Commonwealth Steamship Pier—100 yards away.

The vessel was owned by Joseph Bucci of Revere. Fortunately no one was aboard and no one was injured. The craft had been tied up at the pier since the end of the pogy season four months ago.

"Delaware" Tests Midwater Trawl

The Fish & Wildlife Service research vessel *Delaware* conducted midwater trawl gear tests in the Block Island Sound area during the period February 12 to 22. Light concentrations of fish were located with the aid of echo sounding equipment, and experimental tows were made on these concentrations with a standard Canadian nylon midwater trawl (approximately 35' square mouth opening, 5" mesh taper to 1¼" mesh). Only a small number of alewives and two whiting were taken during the experimental tows.

From all measurable indications the gear was fishing properly. Handling the midwater trawl and spreader doors attached to five fathom pendant lines presented no special problem in setting and hauling back. An air pressure depth meter was tested during midwater trials, and this device allowed positioning of the net at any desired depth.

Eight tows were made with a ¾ #35 small mesh Canadian herring otter trawl (headrope 36', footrope 51', 2" mesh), and over 6,200 pounds of herring and alewives were brine frozen for use as tuna longline bait during a future cruise. Small numbers of shad were taken in the bottom trawl.

Five tows with the standard #41 otter trawl (headrope 79', footrope 110', 4½" mesh) with full set of roller gear in the South Channel area yielded 700 pounds of haddock and 1300 pounds of pollock for technological tests.

Commission to Investigate Research Facilities

A bill recently was introduced in the Legislature by Richard L. Hull of Rockport. John F. Dolan and Barclay H. Warburton of Ipswich calling for an investigation by a special commission of the facilities available for fisheries research within the Commonwealth. The commission would be made up of three members of the House of Representatives, two members of the Senate and one person to be appointed by the Governor.

MEET CAPTAIN JOHN MURLEY OF FAIRHAVEN, MASS.

In case you don't know Captain John, we thought you'd like to meet him. Captain John recently purchased two Caterpillar D375 Marine Engines to repower his scallopers, the FLEETWING and the CHARLES ASHLEY.

Choosing an engine is like choosing a wife . . . she's got to weather the storms . . . work under all conditions. So careful thought and planning must go into the selection. The wrong choice may bring nothing but heartaches and headaches.

If you are planning to build or repower your boat, call PERKINS-MILTON CO. INC. today. Our marine engine representative will assist you, not in the selection of a wife, but in the careful selection of the marine engine to fit your need.

You can then look forward to smooth sailing!

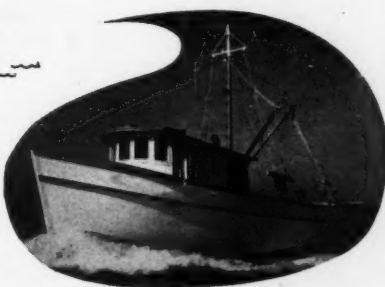
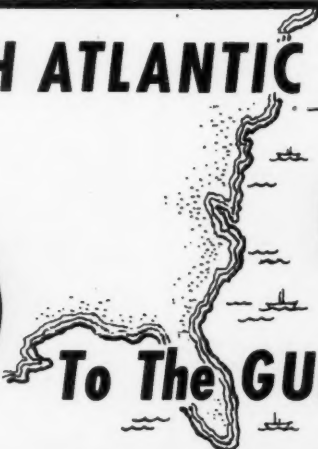
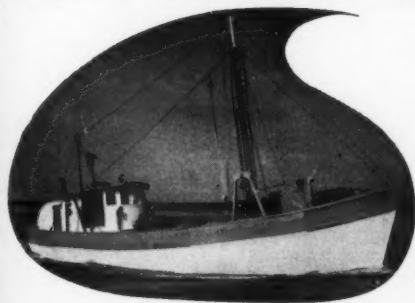


PERKINS-MILTON CO. INC.

Marine Division: 4 Water St., Fairhaven, Mass. Phone: New Bedford 6-0011

Main Office: 376 Dorchester Ave., Boston, Mass. Phone: Andrew 8-4660

From The NORTH ATLANTIC



To The GULF OF MEXICO

MOREHEAD CITY SHIPBUILDING CORP.
Telephone 6-4146 Morehead City, N. C.

Please send me free pictures and information about Hatteras Trawlers of different lengths.

My name _____

Street address _____

City _____ State _____

RUGGED, DEPENDABLE Hatteras Trawlers

are making money for satisfied owners. Top-grade materials, sea-tested design, the craftsmanship of experienced builders, put these boats in a class by themselves. Whether you fish in Northern or Southern waters, there's a HATTERAS TRAWLER to fit your needs. Mail the coupon today and get full information on these outstanding work boats.

OF COURSE, A NYLON NET IS BETTER
AND THE BEST NYLON NETS

ARE
MADE
OF

NYLOCK®

THE ONLY BONDED

NYLON TWINE

EXCLUSIVE U. S. PATENTED BONDING PROCESS
GIVES EVERY NET THESE IMPORTANT ADVANTAGES:



- Knot slippage practically eliminated
- Nets last much longer due to greater abrasive resistance
- Nets stay cleaner, whiter longer
- Nets have much greater resistance to marine organisms

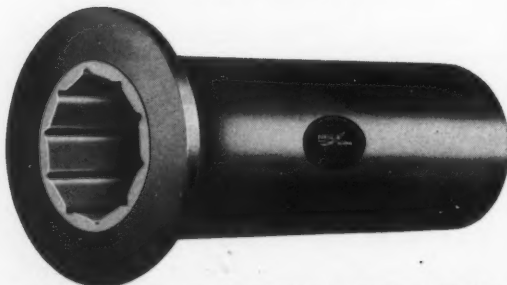
**HEMINWAY
& BARTLETT**

Write for full information to
The Heminway & Bartlett Mfg. Co.
500 Fifth Ave., New York 36

B.F. Goodrich

Cutless Bearings

For Propeller Shafts



Soft rubber, water lubricated, Cutless bearings give years of trouble-free service on fishing vessels. Resist heat, oil, and wear. Quiet and protect shafts too. There is a size and type to fit your boat.

Available at Boat Repair Yards and Marine Equipment Dealers.

Lucian Q. Moffitt, Inc.

AKRON 8, OHIO

Engineers and National Distributors

BOAT CATCHES

For Month of February

Hailing fares. Figure after name indicates number of trips.

NEW BEDFORD (Mass.)

Adventurer (2)	29,000	Major J. Casey (2)	26,500
Anastasia E. (3)	23,000	Marie & Katherine (3)	51,300
Annie M. Jackson (2)	31,000	Mary E. D'Eon (1)	17,000
Austin W. (1)	25,500	Mary Tapper (3)	68,200
Barbara M. (3)	49,000	Midway (3)	69,000
Carl Henry (2)	50,500	Molly & Jane (3)	45,500
Cap'n Bill II (2)	44,400	Olive M. Williams (2)	35,000
Christina J. (1)	24,000	Pauline H. (2)	142,200
Christine & Dan (2)	37,000	Phillip & Grace (2)	55,500
Comber (2)	20,600	Phyllis J. (1)	8,200
Connie F. (2)	36,600	Roberta Anne (2)	24,500
Elva & Estelle (3)	53,000	Rosemarie V. (2)	25,900
Eunice & Rose (3)	37,200	Rush (2)	32,000
Eunice-Lilian (3)	45,400	R. W. Griffin, Jr. (3)	81,400
Falcon (3)	52,100	St. Ann (2)	34,100
Falcon (New York) (1)	4,000	Sea Fox (1)	9,000
Famiglia (1)	15,000	Shannon (1)	13,500
Gannet (2)	49,500	Solveig J. (1)	21,500
Gladys & Mary (3)	61,500	Stanley B. Butler (2)	99,000
Growler (1)	18,500	Star of the Sea (1)	25,000
Harmony (3)	45,400	Stella Maris (3)	47,000
Hope II (1)	18,400	Sunbeam (2)	27,000
Invader (3)	54,700	Teresa & Jean (1)	48,800
Jacintha (2)	64,500	Venture I (3)	67,500
Janet & Jean (1)	9,000	Victor Johnson (1)	10,300
Julia DaCruz (3)	49,000	Viking (3)	58,000
		Whaler (2)	45,800

Scallop Landings (Lbs.)

Abram H. (1)	11,000	Linus S. Eldridge (2)	22,000
Adele K. (2)	9,700	Louise (2)	22,000
Aloha (2)	21,000	Lubenray (2)	15,800
Alpar (1)	11,000	Malene & Marie (2)	18,300
Amelia (1)	11,000	Marmax (1)	11,000
Baltic (2)	22,000	Mary & Jimmy (1)	7,000
B. & E. (1)	9,500	Mary Anne (2)	22,000
B. Estelle Burke (3)	24,000	Mary J. Hayes (2)	22,000
Bobby & Harvey (2)	13,200	Michael F. Densmore (2)	19,000
Brant (2)	22,000	Moonlight (2)	22,000
Bright Star (2)	21,000	Nancy Jane (2)	10,500
Camden (2)	21,600	Nellie Pet (1)	11,000
Carol & Estelle (2)	9,700	New Bedford (2)	22,000
Charles S. Ashley (1)	4,000	Newfoundland (1)	8,500
Clipper (2)	21,000	Noreen (2)	21,700
Debbie Jo-Ann (1)	11,000	Pearl Harbor (2)	22,000
Edgartown (2)	22,000	Pelican (1)	11,000
Elizabeth N. (2)	18,500	Porpoise (2)	17,000
Eugene H. (2)	23,000	Rosalie F. (2)	15,000
Fairhaven (2)	22,000	Ruth Moses (3)	29,500
Flamingo (1)	11,000	Sea Ranger (2)	21,500
Fleetwing (1)	5,500	Sippican (1)	11,000
Jerry & Jimmy (1)	10,000	Stanley M. Fisher (2)	21,500
John G. Murley (2)	22,000	Ursula M. Norton (2)	22,000
Josephine & Mary (1)	6,500	Vivian Fay (2)	19,300
Kingfisher (2)	19,000	Wamsutta (2)	16,300
Laura A. (2)	22,000	Whaling City (2)	22,000
Lauren Fay (2)	21,200		

ROCKLAND (Me.)

Araho (3)	220,000	Little Growler (2)	39,000
Elin B. (2)	86,000	Louise G. (1)	4,000
Eibel B. (1)	5,000	Mabel Susan (4)	47,000
Helen Mae II (2)	44,000	Margaret Jean (1)	2,000
John J. Nagle (1)	150,000		

Scallop Landings (Lbs.)

Pocahontas (1)	22,000
----------------	--------

SEATTLE

Halibut Fleet Fishery

Urania (1)	12,300
------------	--------

NATIONAL FISHERMAN - MARCH, 1957

"Here comes the fleet now, Cyrano. My, they
sure get back in a hurry since they've been using
Roebing Special Galvanized Rope."



Anybody that hangs around a fishing fleet knows that Roebing fishing boat rope does a tough job longer. It's easy to handle and specially galvanized to stand up under hard work and around-the-clock corrosive attack.

Take a tip from a couple of wise birds who know a well-run fleet when they feed off one. Roebing SPECIAL GALVANIZED is tough... for shrimp rope, trawling rope and purse seine rope. Call your distributor or the nearest Roebing office. John A. Roebing's Sons Corporation, Trenton 2, New Jersey.

(Buy from the guy who eats your fish)

ROEBLING

Subsidiary of The Colorado Fuel and Iron Corporation



GLOUCESTER (Mass.)

Agatha (1)	12,000	Lady of the Rosary (6)	129,000
Alden (4)	18,000	Linda B. (2)	4,000
American Eagle (4)	16,000	Little Flower (5)	35,500
Ann Guarino (2)	4,500	Little Joe (1)	3,000
Annie (2)	1,500	Margaret Marie (2)	2,500
Anthony & Josephine (5)	12,500	Marianna II (2)	9,000
Baby Rose (1)	51,700	Maris Stella (3)	82,000
Bonaventure (1)	47,000	Mary (4)	3,500
Cape Cod (5)	9,500	Mary Ann (5)	46,500
Carlansul (4)	12,500	Morning Star (6)	32,500
Carlo & Vince (2)	10,000	Mother Ann (2)	490,000
Catherine B. (3)	105,000	Nancy & Maria (4)	7,000
Charlotte M. (1)	26,000	Natale III (8)	120,500
Cigar Joe (3)	141,000	Njorth (1)	500
Columbia (1)	91,000	No More (1)	1,000
Curlew (3)	164,000	Ocean Clipper (1)	40,000
Dawn (3)	2,500	Ocean Wave (1)	12,000
Dolphin (2)	188,000	Olympia (5)	89,000
Doris F. Amero (3)	176,000	Pioneer (6)	9,000
Eagle (1)	15,000	Prosperity (5)	6,500
Eddie & Lulu M. (2)	4,500	Puritan (1)	85,000
Etta K. (3)	5,500	Raymonde (1)	75,000
Eva II (3)	5,000	Rose & Lucy (5)	35,000
Falcon (7)	13,500	Rosemarie (2)	11,000
Florence & Lee (2)	217,000	Rosie & Gracie (4)	70,500
Flow (1)	180,000	St. Anna Maria (6)	39,500
Frances R. (4)	73,000	St. Anthony (1)	4,000
Frankie & Jeanne (2)	2,000	St. Cabrini (6)	108,500
Gaetano S. (2)	47,500	St. John (3)	3,500
Gertrude E. (3)	2,000	St. Joseph (5)	72,000
Giacoma (4)	8,500	St. Mary (7)	57,500
Holy Family (1)	90,000	St. Nicholas (1)	67,000
Holy Name (3)	40,000	St. Peter (1)	8,000
Ida & Joseph (5)	76,000	St. Peter III (6)	74,000
Immaculate Conception (6)	84,000	St. Providence (5)	9,000
Irma Virginia (3)	4,000	St. Rosalie (2)	72,000
Jackie B. (2)	19,000	St. Stephen (4)	7,000
Jackson & Arthur (1)	1,500	St. Teresa (8)	50,500
Jennie & Lucia (1)	59,000	Salvatore & Grace (5)	45,500
Jorgina Silveira (2)	14,500	Santa Lucia (1)	2,000
Joseph & Lucia (1)	70,000	Sebastiana C. (7)	71,500
Josie II (4)	6,000	Serafina N. (2)	22,000
Judith Lee Rose (1)	317,000	Serafina II (1)	9,000
Killarney (2)	57,000	Sunlight (3)	280,000
Kingsfisher (1)	58,000	Tipsy Parson (5)	6,000
Kurt (2)	3,500	Victoria (2)	2,000
		Villanova (2)	430,000
		Virginia Ann (3)	7,000
		White Owl (3)	3,000

Gloucester Scallop Landings (Lbs.)

Brother Joe (1)	3,000	Rita B. (1)	11,000
Francis L. MacPherson (1)	11,000	Stephen R. (1)	11,000
		Sylvester Whalen (2)	22,000

BOSTON (Mass.)

Agatha (2)	108,000	Michigan (2)	318,500
Agatha & Patricia (4)	121,700	Mother Frances (3)	166,000
Annie & Lucy (2)	5,300	Nautilus (3)	196,300
Arlington (2)	397,500	New Star (2)	186,000
Atlantic (1)	82,000	Notre Dame (4)	158,500
Baby Rose (3)	213,000	Ocean Clipper (1)	28,100
Bay (2)	207,900	Ocean Wave (2)	49,400
Bonaventure (1)	78,000	Ohio (3)	244,200
Bonnie (2)	258,500	Olympia LaRosa (3)	140,100
Bonnie Billow (2)	146,100	Pam Ann (2)	171,500
Brighton (2)	277,600	Patty Jean (2)	254,400
Buzz & Billy (4)	159,400	Pauline H. (1)	110,000
Cambridge (2)	308,900	Phantom (2)	240,600
Caracara (3)	146,800	Pilgrim (3)	187,300
Catherine B. (6)	37,700	Plymouth (1)	102,800
Charlotte M. (1)	69,700	Princess (1)	3,000
Columbia (1)	43,600	Racer (2)	267,400
Comet (2)	190,400	Raymonde (2)	101,000
Eagle (2)	133,000	Red Jacket (2)	284,500
Elizabeth B. (2)	171,300	Regina Maria (2)	112,000
Emily H. Brown (2)	141,400	Rosa B. (2)	188,100
Flying Cloud (3)	601,400	Rosie (3)	18,300
Four (2)	163,500	Rush (2)	235,700
Gaetano S. (1)	71,700	St. Angelo (3)	112,800
Geraldine & Phyllis (2)	133,400	St. Anthony (1)	67,600
Hazel B. (3)	203,500	St. Marco (2)	58,600
Holy Family (2)	121,500	St. Victoria (3)	117,600
Jane B. (2)	212,700	Sant' Antonio II (3)	29,400
J. B. Junior (2)	230,500	Santa Maria (1)	34,800
Jennie & Lucia (3)	153,300	Santa Rita (2)	20,800
Jorgina Silveira (2)	59,100	Santa Rita II (3)	19,200
Joseph & Lucia (1)	48,900	Savio (1)	7,900
Josephine P. II (3)	83,200	Stanley B. Butler (1)	70,500
Leonard & Nancy (2)	75,300	Swallow (3)	184,200
Luckimee (1)	106,000	Terra Nova (3)	262,800
Magellan (1)	14,300	Texas (2)	217,000
Manuel F. Roderick (3)	215,500	Thomas D. (3)	120,400
Mary & Joan (2)	167,600	Thomas Whalen (2)	164,900
Mary Rose (2)	182,500	Villanova (3)	127,600
M. C. Ballard (2)	79,000	Weymouth (2)	153,900
Michael & Grace (1)	7,500	William J. O'Brien (2)	189,800
Michael G. (3)	6,300	Winchester (2)	211,200
		Wisconsin (2)	215,000

"Well pleased with
performance of
NORDBERG MARLIN
in my 31' Gillnetter"
says Even Eide, Stanwood, Wash.



Another satisfied Nordberg owner heads out to the salmon grounds of Puget Sound... it's Even Eide of Stanwood, Washington, at the wheel of his new 31'-V-bottom gillnetter, *ROAMER III*. Designed by Edwin Monk and built by the Northwest Boat Shop, Everett, Washington, *ROAMER III* is powered by a 110 hp Nordberg *MARLIN*.

Mr. Eide's simple statement, "I'm well pleased with the performance of my Nordberg Marlin," speaks well for the smooth, dependable power this engine delivers even under the most rugged operating conditions. Here's steady, day after day, top-notch performance with minimum maintenance... the kind that adds a big plus to your fishing profits.

You want economical "take you out—bring you back" power in your fishing boat. You get it when you specify Nordberg Gasoline Marine Engines in sizes from 60 to 155 hp.

Nordberg Gasoline Marine Engines are built in 7 heavy-duty models for fishing service, from 60 to 155 hp. 4 reduction gear ratios available, and hydraulically-operated reverse and reduction gears are optional on most models.

NORSEMAN MARINE

Manufacturers of Nordberg® Gasoline Marine Engines
105 Nevada Street, Dept. NF, Oshkosh, Wis.

MAIL COUPON NOW!

Please send literature on Nordberg Marine Engines

Name.....

Address.....

City..... Zone..... State.....

N-982

PORTLAND (Me.)

Agnes & Elizabeth (3)	42,400	Medan (1)	230,000
Alice M. Doughty II (5)	81,000	Quincy (2)	250,000
Andarte (4)	245,000	St. George (2)	323,000
Carmela & Lois (1)	1,500	St. Joseph II (1)	3,300
Catherine B. (1)	8,000	St. Rosalie (1)	5,000
Challenge (1)	1,200	Shady Lady (1)	1,200
Challenger (1)	600	Silver Bay (3)	192,000
Dorchester (2)	185,000	Theresa R. (1)	90,000
Dorothy & Ethel II (4)	108,500	Vagabond (3)	135,000
Elinor & Jean (3)	58,000	Vandal (3)	248,000
Ethelina (1)	65,000	Wawenock (2)	425,000
Gulf Stream (3)	239,000	Winthrop (1)	72,000
Kennebec (4)	133,000		

NEW YORK

Andrea G. (3)	119,600	Katie D. (2)	48,400
Carol-Jack (3)	125,000	Lady of Good Voyage (3)	107,000
Clipper (3)	98,000	Manuel P. Domingoes (3)	132,500
Cushman (2)	118,300	Miriam A. (2)	35,000
Edith L. Boudreau (3)	105,500	Richard Lance (3)	44,600
Evelina M. Goulart (3)	106,200	Star of the Sea (1)	60,000
Felicia (2)	97,700	Teresa & Jean (2)	95,300
Golden Eagle (4)	168,100	Tina B. (3)	132,800
Joseph S. Mattos (3)	114,000	Wild Duck (2)	106,400

Scallop Landings (Lbs.)

Barbara & Gail (2)	12,600	Florence B. (1)	7,000
Beatrice & Ida (1)	7,900	Muskegon (1)	5,600
David A. (2)	12,200	Norseman (1)	4,300
Enterprise (2)	14,600	S. No. 31 (2)	10,300

STONINGTON (Conn.)

America (4)	1,800	Lt. Thos. Minor (5)	4,900
Bette Ann (6)	3,900	Lisboa (1)	400
Carl J. (4)	3,200	Little Chief (5)	4,400
Carol & Dennis (1)	1,500	Luann (3)	2,300
Carolyn & Gary (1)	400	Marise (8)	7,600
Connie M. (5)	4,000	Metacomet (1)	19,600
Five Sisters (3)	600	Old Mystic (1)	8,800
Irene & Walter (6)	2,600	Weezie May (2)	3,600
Jane Dore (5)	2,700	Wm. Chesebrough (7)	4,000

WOODS HOLE (Mass.)

Arnold (1)	7,200	Margie L. (3)	18,300
David & James (1)	3,400	Papoose (2)	20,800
Gertrude D. (2)	19,700	Phyllis J. (2)	6,300
Kelbarsam (3)	17,100	Roann (2)	24,400
Madeline (3)	15,000	Three Bells (3)	17,100

Scallop Landings (Lbs.)

Babe Sears (1)	1,500	Mary J. Landry (1)	2,400
Carol & Estelle (1)	3,900		

Fish Ladder Tests

(Continued from page 14)

ducted in a series. The exact time of passage was carefully noted by use of electronic recorders. Technicians must be exceptionally keen observers, as the fish "pass a weir in the blink of an eye". The length of time for passage in the two fishways will be statistically determined by study of the data. If fishways could be constructed only half as long as at present, it would cut the costs in half.

The laboratory also conducts "fishway capacity tests", in which 3,000 to 4,000 fish are released together into the fishway to see how many fish can pass at a given time. Whenever a sturgeon enters a holding pool, Ivan Donaldson, biologist at Bonneville Dam, transports the fish to "sturgeon pool" for further study.

One salmon found in the holding pool was some fisherman's "big one that got away"—he had a cherry bobber hooked in his cheek. The most surprising thing observed by the biologist was a fish which jumped some eight feet into the air from the holding pool and broke one of the 1000-watt mercury vapor lights overhead.

Prime objectives of the fish ladder laboratory are to determine what features fishways must have to persuade fish to use them, and to cut costs, reports Dr. Collins. He commented: "In the past the Corps of Engineers, in the absence of definite information, had to build large fishways to handle all contingencies. Fish facilities at Bonneville cost almost \$8,000,000 at a time when construction costs were much lower than at present. The Dalles Dam fish facilities will cost about \$20,000,000."

Mississippi Tuna Clippers Making Good Catches

According to Cecil W. Drake, president of Marine Sales & Service of Pascagoula, two of his 110-ft. long-line tuna vessels are now fishing in the Gulf of Campeche off the Yucatan Peninsula, and are making very good catches. During November and December the two vessels caught tuna at the rate of about two tons a day.

Mr. Drake hopes to expand to six boats in operation by the first of April, and possibly 10 by the first of June. He reports there is a good sales market for tuna and there is a possibility that a large cannery will enter the field and build a good-sized cannery in Pascagoula.

Mr. Drake also reported that he expects to form a Mississippi corporation soon to operate a fleet of tuna boats in the Gulf. If a big cannery is established, then it will demand the catches of at least ten tuna boats.

New Seafood Inspector Appointed

Clarence H. Canaan, 55, native of McHenry and Biloxi resident nearly all his life, has been appointed seafood inspector for the Mississippi Seafood Commission, succeeding the late Meco Filipich who died recently.

Mr. Canaan was assistant chief inspector under Mr. Filipich for 12 years, prior to which he was a fisherman and packer. Tom Moody of Pascagoula was named assistant inspector. He has been employed by the Commission for 11 years.

Mr. Canaan reported that while the oyster season has been fair, the Commission hopes that the next season will be much improved. Mississippi reefs were closed for oyster dredging on February 9.

Shrimp Predominates

Fish and shellfish landings in November amounted to 2.1 million pounds, 61 percent greater than the production during the same month in 1955. Increased landings of shrimp and menhaden were the principal reason for the greater production.

Shrimp, with a yield of 1.4 million pounds, led all other species landed during November. This was 43 percent greater than the shrimp catch during the same month last year. Foodfish landings of 295,000 pounds were over twice as great as the quantity caught in November 1955.

Tagged Yellowfin Tuna Reveals Vertical Migration Pattern

Fishery research has disclosed that in at least one instance, a Pacific yellowfin—normally found near the surface—has taken to deep-water swimming in the open sea. Late in 1955, a Fish and Wildlife Service research vessel tagged and released a troll-caught yellowfin tuna near Christmas Island in the mid-Pacific. Thirteen months later the same fish was recaptured by a Japanese fishing boat some 700 miles to the east and deep down in the ocean.

According to Fish and Wildlife Service officials, this is the first time a "surface-schooling" yellowfin has been known to have been taken as a deep-swimming fish in the open sea. The fish had grown considerably in the 13-month interval—from 55 pounds to 95 pounds.

The finding of this one yellowfin as a deep swimmer is not a conclusive item, fishery biologists say, but it does indicate a "vertical pattern of migration" not hitherto known.

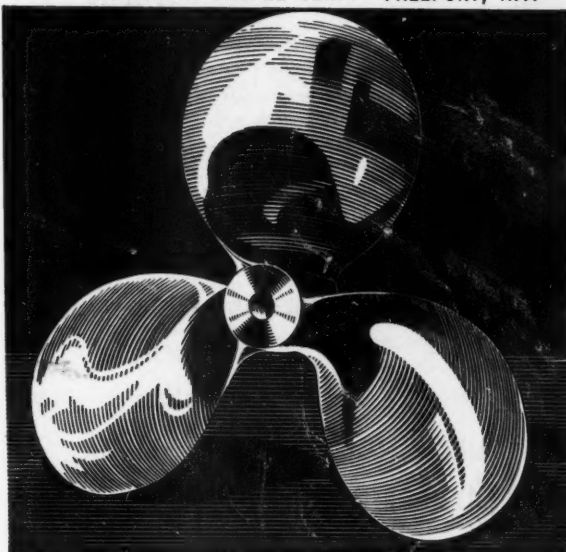
Data relative to horizontal migration habits of the various tuna varieties is being slowly accumulated. Last year, an albacore was taken—15 months after tagging—2,670 miles away. It had gained 40 pounds in weight. Another one traveled more than 2,000 miles. Bigeye tuna have been known to migrate as much as 800 miles.

Columbian

the BIG WHEEL in propellers

The diameter may be 8" or 8' or more, it may be a 2 or 3 or 4 or 5-bladed, for speed or power or both. But if it carries the name Columbian, it's the Big Wheel for you in its advanced design, skilled metallurgy, precise workmanship, all-round dependability and value. Ask your dealer, or send for catalog.

COLUMBIAN BRONZE CORP. FREEPORT, N.Y.



MUSTAD Key Brand FISH HOOKS

Actions speak much louder than words. Thus—when year after year—experienced fishermen—continue to "stick to" the use of Mustad Key Brand Fish Hooks there can be only one conclusion and that is that these fine fish hooks must be dependable.

O. MUSTAD & SON
Established 1832
OSLO NORWAY

Sales Agents
Ed. W. Simon Co., Inc.
320 Broadway, New York 7

H. L. Bowlds & Son
2345 W 3rd St. 17070 Hamlin Rd.
Los Angeles 57 Seattle 55



"The APITOL" EF PROVIDES SMOOTH, 100% REVERSE WITH EASY MANEUVERABILITY

EF Reverse & Reduction Gear

Was designed especially to give you easier control and simple operation on any of the following engines—Caterpillar D-311, Cadillac, Oldsmobile 88 and 98, Chevrolet V-8, Pontiac V-8 and Buick V-8 (up to 210 h.p.) Ford and Mercury V-8 (85 h.p. and up) also Fordson Diesel.

Capitol Gears are almost as easy to install as they are to reverse. Built to give a lifetime of service!

Write for complete information:

SINCE 1905

AUTO ENGINE WORKS, INC.

★ 333(A) North Hamline Avenue • St. Paul 4, Minnesota

FISHING KNIVES

STAINLESS Fillet

Oyster and Clam

Crabmeat

Scallop

FULL LINE — Write for catalogue

R. MURPHY CO. AYER, MASS.

SEINERS SHRIMPERS DRAGGERS LOBSTERMEN CRUISING AUXILIARIES PILOT BOATS

OSCO DIESEL

FORD MARINE DIESEL

WORKBOATS SURVEY CRAFT PRACTICAL CRUISERS GILNETTERS BOONIES

DOES THE WORK

OF 100 HP GASOLINE

OSCO MOTORS CORP. Philadelphia 40-AF, Pa.

Commission Merchants and Wholesale Dealers in

ALL TYPES OF FROZEN SEAFOOD

WM. M. McCLAIN, INC.

231 S. FRONT ST. PHILADELPHIA, PA. 230 S. WATER ST.

THE HARRIS COMPANY

PORTLAND, MAINE

Specializing in Fishing Boat Supplies

Marine Hardware — Dragging Equipment
Electronics — Fuel — Groceries

Rhode Island Landings Increase

Landings by commercial fishing craft at Rhode Island ports during October amounted to 16.7 million pounds valued at \$440,000 to the fishermen. Compared with the production and value of October 1955, this was an increase of 43 percent in quantity and 22 percent in value.

Increased landings of yellowtail and blackback flounders, whiting and fish for animal food, bait and reduction, accounted for the total gain in production, notwithstanding decreased landings in butterfish, fluke and menhaden.

To Build Steel Trash Fish Boat

Gladding-Hearn Shipbuilding Corp., Somerset, Mass., has been awarded a contract to design and build a 38-foot welded all-steel fishing boat for Edward M. and Thomas F. Conlon of East Providence, R. I.

The dragger will operate from Point Judith in trash fishing, and her design will be based on the *North Star* which the yard built a year ago.

The new boat will be powered by a 4-71 General Motors Diesel and will carry 40,000 pounds of fish. Delivery is scheduled for August.

How to Land Top Quality Groundfish

(Continued from page 16)

are allowed to go sidewise open up still more sterile flesh to possible contamination and staining. In either case, the fillet must be trimmed, with resultant loss in both time and yield.

In Winter the ripping procedure differs from the above in that the first cut across the throat should sever both the throat and the gullet. No cut is made to separate the tongue from the gills, which are left in the fish. The second motion of the knife should rip the fish straight from the throat to the vent.

Good practice during ripping and gutting requires that the fisherman stand in an empty checker or on cleared deck space and work with the round fish which he can reach conveniently. He may then drop the gut contents or allow feces to fall at his feet, and these can be washed away to a scupper. Therefore, liberal deck space should be made available between the hatches and the checkers to give him room to work. Since a deck hand cannot reach across a large checker, it might be practical to run low partitions through such checkers, dividing them into smaller units. The increased number of compartments would enable the fisherman to keep working from one cleaned-out compartment to the next, until the whole checker is emptied.

When the catch is very heavy and there is little or no standing space or space to receive ripped fish, the latter should be transferred to checkers on the side of the deck not being worked, until such time as space closer to the full checkers is made available. In this respect, it might be very handy to have a checker built over a hatch normally not used while the vessel is at sea. Such a checker could be an integral part of the hatch cover also.

Washing Operations

There is little evidence that the present trade practice of washing gutted round fish or flounders in wash boxes in conjunction with normal dressing operations adds to the keeping time of the fish over that of similar lots not washed at all. Before the fish are dressed, the gut cavity is sterile except for the bacteria in the guts. Depending upon the care with which the guts are removed, the inside belly walls may be lightly or heavily contaminated. Spoilage is most rapid in the gut cavity, and spoilage in an unwashed lot of fish will not be as uniform as in a washed lot—there may be some fish which will spoil faster than the washed fish and others much slower.

Washing after gutting may remove some of the gross contamination from fish, but unless these fish are washed separately from those lightly contaminated—and this is not too practical a policy aboard a trawler—the contami-

nation wash w for the similar

In vi taken i the ch pre-gu tamina during given wash b

Drop bottom them u fall on may ha metal elimin when box on toms p

Ice s and ce change will no and th

It is minim will co holds. are de

(1) gives s only a work cilities renew lecting main painte

(2) boards without

(3) wood partic those made in. me work,

a trav are sh ting th "rests" tom a moved behind

In u no pa through and ti this a from stowe wing, were better

The neede about quired ice ag ible i stalled

nation from the really dirty fish will be deposited by the wash water onto other relatively clean fish. This accounts for the fairly uniform rate of spoilage from fish to fish in similarly handled, washed fish.

In view of the above, it is recommended that care be taken in removing feces squeezed onto fish as they lie in the checkers, even to the extent of giving these fish a pre-gutting hosing, that care be taken to eliminate contamination of both outside and inside surfaces of the fish during the dressing operation, and that the gutted fish be given a thorough rinsing in moving water in a grated wash box prior to drainage and stowage.

How to Move Fish Below Deck

Dropping fish directly through a hatch or through the bottom of a wash box to a staging several feet below gives them unnecessarily harsh treatment, and individual fish fall onto a surface which carries whatever contamination may have been left there previously. Wood, or preferably metal chutes, can be used to improve handling and to eliminate the forking which almost invariably follows when fish are dropped directly through a hatch or wash box onto the staging below. Chutes with perforated bottoms permit the fish to drain before they are stowed.

Ice should be stored for convenience in forward, after, and central fish pens. The selection of pens should be changed frequently to insure that ice unused on one trip will not be covered over with fresh ice upon re-charging, and thus remain unused during the ensuing trips.

Care of Fish Holds and Use of Screens

It is to be expected that those operators who have had minimum losses resulting from contaminated fish holds will continue, for the present at least, to use wood-lined holds. Methods for more effective use of wood fish rooms are described below:

(1) *Extra sets of removable boards should be used.* This gives sufficient time for drying and repainting boards, not only at refit but at any time during the year when this work is necessary. Provided suitable artificial drying facilities exist on shore, boards taken out of a fish hold for renewing may be dried properly before repainting. Neglecting to dry boards thoroughly before repainting is the main reason for the failure to maintain reasonably good painted surfaces.

(2) *Notches should be cut in the edges of all movable boards.* This allows them to be raised and taken out without marring the flat surfaces.

(3) *Where practicable, screens should be used over wood surfaces on which it is difficult to keep paint.* In particular, screens may well be used on wood wings in those pens where the first-caught fish are stowed. Screens made of 12-gauge galvanized iron fencing fabric of 1½-in. mesh, and of 1-in. aluminum alloy angles as framework, have been tried successfully on one wood wing in a trawler's fish hold. Eight such screens (some of which are shown in place in Fig. 2) were used, each screen fitting the panel of the wing formed by the shelf battens or "rests", fish hold stanchions, or the curve of the hold bottom and side, as the case may be. The screens were removed and washed after each trip, and the wood wings behind the screens were washed down.

In use at sea, it was found that the icer need exercise no particular care in icing the wings. Enough ice filtered through the fencing fabric into the inch space between it and the wing, during the course of normal icing, to fill this area. Fish landed from against the screens were free from the bilgy odors which were encountered in fish stowed on the opposite side of the pen against the other wing, which was not screened. Fish from the screens were without sour odors also, and in this respect were better than the average for fish stowed in the pen interior.

The use of screens greatly decreased the quantity of ice needed to shield fish from contaminated wood surfaces—about one-third as much ice is used with screens as is required if the icer must rely on his own technique to stow ice against the unscreened wing. Because screens are flexible in design and simple to construct, they may be installed at any time, without delaying fishing operations.

RITCHIE FLOAT TYPE COMPASS



The Ritchie Compass is well known and approved by navigators as the standard the world over. The distinctive feature of this compass is the attachment to the compass card of an air chamber, by which almost the entire weight of the card is supported by the buoyancy of the liquid, thus reducing the friction and the wear on the pivot to a very small amount and increasing the sensitiveness of the compass.

Send for Latest Catalog

E. S. RITCHIE & SONS INC.
PEMBROKE, MASS. Established 1850

Now! A Special Anti-Fouling Paint Gives Longest Lasting Protection Per Dollar!

Now . . . actual in-use tests under murderous tropic conditions prove Federal Special Tropical HTS (High Toxic Strength) gives amazingly long lasting protection against marine growth—at the lowest possible cost! The reason: this high-copper content paint has been chemically perfected to give completely effective protection . . . right down to the last ten-thousandth of an inch of film. You'll be amazed at the startling absence of either vegetable or animal matter on your ship bottom.

Start saving at your next haulout. Investigate Federal Special Tropical HTS . . . and keep future haulouts at a minimum. Mail coupon today for complete information.

STOCKS IN ALL
PRINCIPAL FISHING PORTS

THE FEDERAL PAINT COMPANY, INC.

DEPT. 24 • 33 RECTOR STREET • N.Y. 6
SAN FRANCISCO • NEW ORLEANS

FREE INFORMATION • MAIL COUPON NOW

The Federal Paint Co., Inc. Dept. 24
33 Rector St., N. Y. C. 6, N. Y.

Gentlemen:
Please send me complete information and prices on HTS.

Name

Firm

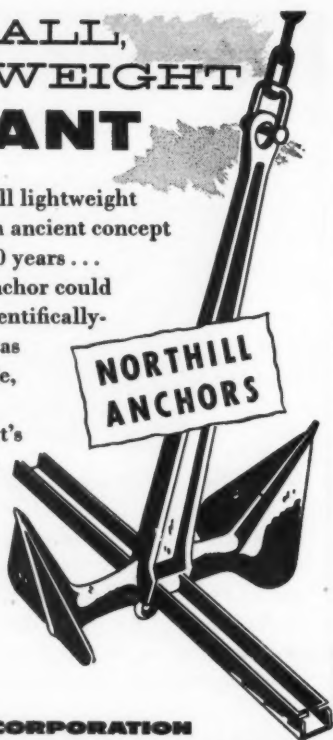
Address

City State



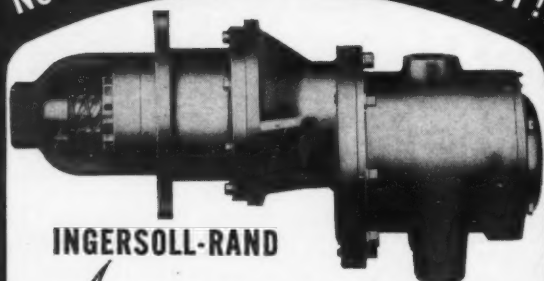
SMALL, LIGHTWEIGHT GIANT

The original Northill lightweight anchor disproved an ancient concept that had lasted 4,000 years... that only a heavy anchor could hold a boat. The scientifically-designed Northill was small, easy to handle, but a giant in holding power. That's why it has been the largest-selling lightweight anchor for 17 years! 3 to 105 lbs. For boats up to 80 ft.



THE GARRETT CORPORATION
AIR CRUISERS DIVISION
BELMAR, NEW JERSEY

NO BATTERIES TO WORRY ABOUT!



INGERSOLL-RAND

Air **STARTING MOTORS**
give you trouble-free engine starts

RELIABLE—I-R Air Starting Motors are built for fast, sure engine starting—anywhere.

LOW COST—No batteries, generators or electrical parts to buy. Practically no maintenance expense.

COMPACT—I-R Air Starting Motors are lightweight, small but powerful. For all popular gasoline and diesel engine sizes. Easily installed.

Ask your engine distributor to show you the I-R Air Starting Motor line. Or write for Bulletin 5094A.



INGERSOLL-RAND

11 Broadway, New York 4, N.Y.

18-512

New Bedford to Have New "Fish Flour" Plant

The Viobin Corp. of Monticello, Ill. is scheduled to get underway sometime in May with a new industry which will boost the trash fishing business in New Bedford. The company will process trash fish into a "fish flour".

Ezra Levin, president of the Corporation, has confirmed a report that the firm will operate in the former New Bedford Fish Products Corp. plant at the foot of Washburn St. The new plant will employ from 20 to 30 men; will operate in three shifts and will be able to process from 70 to 100 tons of trash fish daily.

The Viobin plant has patented a method of processing industrial fish into a nutritive fish flour, which can be added to cereals, flour, corn meal and other foods. The process is said to be entirely without odor or pollution, the reason other methods have failed. It is claimed that the new plant will be the first of its kind in this country. A similar plant is operating in Norway.

Mr. Levin said that establishment of the firm in New Bedford will expand the trash fish business. New Bedford was chosen as an ideal site for the plant, because there is an available fleet of trash fish boats.

Quahog Dredging Area Extended

Dartmouth Selectmen late last month signed an order opening a wider Clarks Cove area to Dartmouth fishermen dredging for quahogs. They also ordered that a small area in the Cove, found to contain scallop seed, be closed to all shellfishing. Both orders took effect March 1.

The area opened on the Dartmouth side of the Cove lies south of a line drawn from the Sol-e-Mar Hospital stack on the west to the foot of Portland St. in New Bedford on the east.

Closed to all shellfishing in the new order is an irregular piece of water north of the town buoy. It lies along the New Bedford-Dartmouth line, goes six-tenths of a mile on the easterly side and about half that length on the westerly edge.

Selectmen in issuing the orders, followed the recommendations of Frederick C. Wilbour, director of the Division of Marine Fisheries, who had made a survey of the disputed waters. He reported that he found certain parts of the Cove to be rich in scallop seed.

Dragger Runs Aground

The 94-ft. dragger *Stanley B. Butler*, Capt. Earl Anderson of New Bedford, was stuck in the mud of outer Boston Harbor for five hours last month. She finally was pulled free at high tide, and returned to port without harm to the vessel or its 11-man crew.

The dragger was on its way to New Bedford after unloading a six-day catch of fish at the Boston Fish Pier.

Bridge Construction Would Aid Shellfish

Fairhaven Shellfish Warden Joseph B. Goulart is seeking State aid for construction of a 15-ft. bridge span across Causeway Road, between Sciticut Neck and Long Island, to facilitate propagation of shellfish in Jack's Cove and Deacon's Cove, both north of the causeway. The span would duplicate one on the east end of the causeway, where shellfish production has increased considerably.

Mr. Goulart believes that at least two more areas could be opened for production if the span were constructed. These are an area north of Jack's Cove and another south of Causeway Road, opposite Jack's Cove.

Construction of the suggested span would improve water circulation. According to Mr. Goulart, stagnant water, caused by culverts congested with sand, is now preventing propagation of shellfish, in these areas.

Wants

Coun
reporte
quahog
the nor
80 bush
is 15 bu

Mr. L
rules, a
to incl
warden
assign
dresses

Rare

A 30
groupe
last me
ford. 2
about
up in
tucket

Licen

Prov
regula
license
poses,
comm
Point
first h

No l
to tak
hour p
in exc

Fish
sea cl
supply

Vesse

A 4
in the
Kelley
Elsie,
wood
and ir
has b
owned
done a

The
She ha
at the
engine
Ivanh
the Iv

The
ered v
She is
Cater
Charl

At l
by Mi
Huckl

Geor

Geo
month
enter
with
Chath

MAR

Wants Quahog Rules More Strictly Enforced

Councillor William E. Hall of New Bedford last month reported on what he termed unlawful practices among quahoggers. He charged that dredgers are going beyond the north limit and returning with catches of as much as 80 bushels. The limit permitted under a single license is 15 bushels a day.

Mr. Hall suggested more strict enforcement of shellfish rules, and the Shellfish Committee voted to make a survey to include all of the city's 24 license holders. Shellfish warden Tobias Cabral was instructed also to check boats, assign numbers and to submit a report of names, addresses and numbers of the boats to the city clerk.

Rare Fish Caught

A 30-inch, 15-lb. specimen, believed to be a black grouper, a fish extremely rare to area waters, was caught last month by the dragger *Carl Henry* out of New Bedford. The fish is a West Indies species, and is abundant about the Florida Keys. The *Carl Henry* picked the fish up in 50 fathoms about 30 to 40 miles south of the Nantucket Shoals Lightship.

License Required for Taking Sea Clams

Provincetown Selectmen amended the town's shellfish regulations last month to require commercial shellfish licenses for the taking of sea clams for commercial purposes, effective on February 14. No person can take for commercial use sea clams from the area between Long Point and Race Point out to territorial limits without first having obtained a commercial shellfish permit.

No holder of a commercial license shall be permitted to take in excess of 10 bushels of sea clams in any 24-hour period, and no boat dragging for sea clams shall take in excess of 20 bushels in a like period.

Fishermen had complained that the large quantities of sea clams being taken from the area were depleting the supply.

Vessels on the Ways

A 4-cylinder General Motors Diesel is being installed in the Chilmark dragger *Dorothy and Everett* at D. N. Kelley & Son, Inc., Fairhaven. The scalloper *Eleanor & Elsie*, owned by Elmer Jacobsen, has had her iron and wood sheathing replaced and a steel rudder constructed and installed at Kelley's. Magne Risdol's boat *Barbara* has been converted to quahogging, and the *St. Ann*, owned by Tom Larsen, has had shaft and propeller work done at Kelley's.

The *Solveig J.*, owned by Jack Jacobsen, is back fishing. She has been repowered with a 400 hp. Enterprise engine at the Hathaway Machinery Co., Fairhaven. Complete engine overhauls have been made at Hathaway's on the *Ivanhoe* and the *Catherine C.* Bill Collis is the owner of the *Ivanhoe* and Joshua Murphy owns the *Catherine C.*

The *Fleetwing* is back scalloping, having been repowered with a Caterpillar D375 marine engine at Hathaway's. She is owned by Capt. John Murley of Fairhaven. A Caterpillar engine is also being installed on the scalloper *Charles Ashley*, another of Capt. Murley's boats.

At Norlantic Diesel, Inc., Fairhaven, the *Noreen* owned by Mike Smith has been in for general repairs, and the *Huckleberry Finn* has been converted to clamming.

George C. Cahoon

George C. Cahoon, 82, a retired oysterman, died last month in Cape Cod Hospital, West Chatham. Mr. Cahoon entered the oyster business in 1905, and was associated with a branch of the S. W. Gould & Sons Oyster Co. in Chatham. He retired from this concern in 1953.

WOLVERINE



MARINE DIESEL ENGINES

WOLVERINE LOW and MEDIUM SPEED
170 H.P. to 400 H.P.

WOLVERINE and WAUKESHA HIGH SPEED
• 170 H.P. to 525 H.P.



For sales and service contact: WOLVERINE MARINE DEPARTMENT

THE COULTER & MCKENZIE MACHINE CO.

771 WATER ST., BRIDGEPORT 3, CONN., Phone EDison 5-1101

NETS • RAKES • TONGS

Bait Netting - Wire Baskets

Rope - Lobster Pot Heading Twine - Corks

LARGE STOCK

Prompt, intelligent, personal attention to your order

W. A. AUGUR, Inc.

35 Fulton Street

New York 38, N. Y.

BEekman 3-0857

FOR BETTER FISHING
MODEL "C"

"SUrECHO"

MORE DEPTH PER \$

120 Fathoms

For 6, 12, 32 V. D.C.

and 100 V. A.C. Operation

Accurate • Reliable •

Sea Going



Ask your dealer

Manufactured by

WILFRID O. WHITE & SONS, INC.

(Formerly Kelvin-White Company)

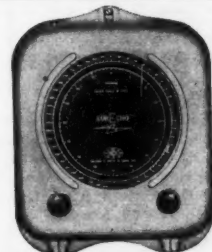
178 ATLANTIC AVE., BOSTON 10, MASS.

406 Water St., Baltimore 2, Md.

40 Water St., New York 4, N. Y.

EXPORT DEPT.: 100 E. 42nd St., New York 17.

Cable: PHILYORK



Send for descriptive folder.

DWIGHT S. SIMPSON

AND ASSOCIATES

DESIGNERS OF FISHING VESSELS

Judith Lee Rose, Evelyn Brown, Edgartown,

Mother Frances and many others

COMMONWEALTH PIER

SO. BOSTON, MASS.

GM DIESEL 8-268A CRANKSHAFT

3274022 — 3244800 — 3274667

Surplus New in Original Crates. F.O.B. Miami, \$750 each.

We have Surplus Parts for Buda, Hercules, GM, etc.

AUTO-MARINE ENGINEERS, INC.

3464 N.W. North River Drive

NEwton 5-2401

Miami 12, Florida

WHERE-TO-BUY DIRECTORY

AIR STARTING MOTORS

Ingersoll-Rand Co., 11 Broadway, New York 4, N. Y.

ANCHORS

Danforth Anchors, 2121 Allston Way, Berkeley, Calif.

The Maxim Silencer Co., 126 Homestead Ave., Hartford, Conn.

"Northhill": Air Cruisers Div., Garrett Corp., Belmar, N. J.

ANTIBIOTICS

Chas. Pfizer & Co., Inc., 630 Flushing Ave., Brooklyn 6, N. Y.

BATTERIES

Bowers Battery & Spark Plug Co., Reading, Pa.

Crescent Battery & Light Co., Inc., 819 Magazine St., New Orleans 12, La.

Exide Industrial Division—The Electric Storage Battery Co., 42 South 15th Street, Philadelphia 2, Pa.

Surette Storage Battery Co., Salem, Mass.

Willard Storage Battery Co., 246 East 131 St., Cleveland 1, Ohio.

BOOTS

United States Rubber Co., Rockefeller Center, New York, N. Y.

CANS

Continental Can Co., 100 E. 42nd St., New York, N. Y.

CLOTHING

The H. M. Sawyer & Son Co., Cambridge, Mass.

A. J. Tower Co., 24 Simmons St., Boston, Mass.

United States Rubber Co., Rockefeller Center, New York, N. Y.

COLD STORAGE

Quaker City Cold Storage Co., Philadelphia, Pa.

COMPASSES

John E. Hand & Sons Co., Atlantic & Washington Avenues, Haddonfield, N. J.

Marine Compass Co., Pembroke, Mass.

E. S. Ritchie & Sons Inc., Pembroke, Mass.

Wilfrid O. White & Sons, Inc., 178 Atlantic Ave., Boston 10, Mass.

CORDAGE

American Manufacturing Co., Noble and West Sts., Brooklyn, N. Y.

Cating Rope Works, Inc., Maspeth, N. Y.

Columbian Rope Co., Auburn, N. Y.

The Edwin H. Fittler Co., Philadelphia 24, Pa.

New Bedford Cordage Co., 131 Court St., New Bedford, Mass.

COUPLINGS

Morse Chain Co., Ithaca, N. Y.

DEPTH SOUNDERS

Bendix Aviation Corp., Pacific Div., 475 Fifth Ave., New York 17, N. Y.

Edo Corporation, College Point, L. I., N. Y.

Radiomarine Products, a Division of RCA, 75 Varick St., New York 13, N. Y.

Raytheon Manufacturing Co., 138 River St., Waltham 54, Mass.

Wilfrid O. White & Sons, Inc., 178 Atlantic Ave., Boston 10, Mass.

DIRECTION FINDERS

Bludworth Marine, 92 Gold St., N. Y. 7, N. Y.

Kaar Engineering Corp., Palo Alto, Calif.

Radiomarine Products, a Division of RCA, 75 Varick St., New York 13, N. Y.

Raytheon Manufacturing Co., 138 River St., Waltham 54, Mass.

ELECTRIC GENERATING PLANTS

D. W. Onan & Sons, Inc., University Ave., S.E. at 28th, Minneapolis 14, Minn.

ENGINES—Diesel

Allis-Chalmers, Buda Division, 1135 S. 70th St., Milwaukee 1, Wisc.

American MARC Inc., 1801 W. Florence Ave., Box 549, Inglewood, Calif.

Caterpillar Tractor Co., Peoria, Ill.

Cummins Engine Co., Columbus, Ind.

Detroit Diesel Engine Div., General Motors Corp., Series 51, 71 and 110 Marine Diesels, 13400 W. Outer Drive, Detroit 28, Mich.

Enterprise Engine & Machinery Co., 18th and Florida Sts., San Francisco 10, Calif.

Fairbanks, Morse & Co., Chicago, Ill.

Ford Marine Engines, Osco Motors Corp., 3627 N. Lawrence St., Philadelphia 40-AF, Pa.

Gray Marine Motor Co., 646 Canton Ave., Detroit, Mich.

P&H Diesel Engine Division Harnischfeger Corp., 500 S. Main Street, Crystal Lake, Illinois.

Hercules Motors Corp., 101 Eleventh St., S.E., Canton, Ohio

Lister-Blackstone, Inc., 42-32 21st St., Long Island City 1, N. Y.

H. O. Penn Machinery Co., Inc., East River and 140th St., New York, N. Y.

Perkins-Milton Co., Inc., 376 Dorchester Ave., South Boston 27, Mass.

Red Wing Marine Corp., Red Wing, Minn.

White Diesel Engine Division, White Motor Co., Springfield, Ohio.

Wolverine Marine Dept., The Coulter & McKenzie Machine Co., 771 Water St., Bridgeport 3, Conn.

ENGINES—Gasoline

Marine Engine Division, Chrysler Corp., 7700 Russell St., Detroit 11, Mich.

Ford Marine Engines, 3627 N. Lawrence St., Philadelphia 40-AF, Penna.

Gray Marine Motor Co., 646 Canton Ave., Detroit, Mich.

Nordberg Gasoline Marine Engines, Oshkosh, Wisc.

Norseman Marine, 105 Nevada St., Oshkosh, Wisc.

Red Wing Marine Corp., Red Wing, Minn.

ENGINES—Outboard

Evinrude Motors, 4670 N. 27 St., Milwaukee 16, Wis.

Johnson Motors, 6300 Pershing Rd., Waukegan, Ill.

Kiekhaefer Corp., Fond du Lac, Wis.

ENGINE CYLINDERS—Diesel

Porous Chrome Plated: Van Der Horst Corporation of America, Olean 3, N. Y.

FISH KNIVES

R. Murphy Co., Ayer, Mass.

FISHING GEAR

The Harris Co., Portland, Me.

Westerbeke Fishing Gear Co., Inc., 270 Northern Ave., Boston, Mass.

FLARE SIGNALS

Kilgore Inc., International Flare Signal Div., Westerville, Ohio

FLEXIBLE HOSE LINES

Aeroquip Corp., 300 South East Ave., Jackson, Mich.

FLOATS

Dale Plastics Corp., 5736 12th St., Detroit 8, Mich.

J. H. Shepherd Son & Co., Elyria, Ohio.

B. F. Goodrich Sponge Products Division, Shelton, Conn.

The Linen Thread Co., Inc., 418 Grand St., Paterson 1, N. J.

GENERATING SETS

Allis-Chalmers, Buda Division, 1135 S. 70th St., Milwaukee 1, Wisc.

Detroit Diesel Engine Div., General Motors Corp., Series 51, 71 and 110 Marine Diesels, 13400 W. Outer Drive, Detroit 28, Mich.

GENERATORS

Safety Industries, Inc., Box 904, New Haven 4, Conn.

HOOKS

O. Mustad & Son, Oslo, Norway.

"Pfueger": Enterprise Mfg. Co., 110 Union St., Akron, Ohio.

INSULATION

"Styrofoam" (Expanded Dow Polystyrene): The Dow Chemical Co., Midland, Mich.

LORAN

Edo Corporation, College Point, L. I., N. Y.

Radiomarine Products, a Division of RCA, 75 Varick St., New York 13, N. Y.

Sperry Gyroscope Co., Division of the Sperry Corp., Great Neck, N. Y.

MOTOR GENERATORS

Safety Industries, Inc., P.O. Box 904, New Haven 4, Conn.

NETS

W. A. Augur, Inc., 35 Fulton St., New York.

The Carron Net Co., 1623 Seventeen St., Two Rivers, Wisc.

The Fish Net & Twine Co., Menominee, Mich.

Hope Fish Netting Mills, Inc., Hope, R. I.

The Linen Thread Co., Inc., 418 Grand St., Paterson 1, N. J.

Joseph F. Shea, Inc., East Haddam, Conn.

A. M. Starr Net Co., 10 Summit Street, East Hampton, Conn.

Western Net Shop, Freeport, Texas.

NET LIFTERS

Crosley Co., 16 West 5th St., Erie, Pa.

OIL—Lubricating

Gulf Oil Corp., Gulf Bldg., Pittsburgh, Pa.

Socony Mobil Oil Co., Inc., Marine Sales Dept., 26 Broadway, New York 4, N. Y.

Standard Oil Co. of California, Standard Oil Bldg., San Francisco, Calif.

PAINTS

The Federal Paint Co., Inc., 33 Rector St., New York 6, N. Y.

Henderson & Johnson, Inc., Gloucester, Mass.

International Paint Co., Inc., 21 West St., New York, N. Y.

Pettit Paint Co., Belleville, N. J.

Tarr & Wonslow Ltd., Gloucester, Mass.

C. A. Woolsey Paint & Color Co., Inc., 229 East 42nd St., New York 17, N. Y.

PROPELLERS

Columbian Bronze Corp., Freeport, N. Y.

Federal Propellers, Grand Rapids, Mich.

Ferguson Propeller and Reconditioning Co., 1132 Clinton St., Hoboken, N. J.

Hyde Windlass Co., Bath, Maine.

Michigan Wheel Co., Grand Rapids, Mich.

PROPELLER RECONDITIONING

Ferguson Propeller and Reconditioning Co., 1132 Clinton St., Hoboken, N. J.

PROPELLER REPAIRS

Ferguson Propeller and Reconditioning Co., 1132 Clinton St., Hoboken, N. J.

PROPELLER SHAFTS

The American Brass Co., Waterbury 20, Conn.

The International Nickel Co., Inc., 67 Wall St., New York 5, N. Y.

PUMPS

The Edson Corp., 334 So. Water St., New Bedford, Mass.

Jabco Pump Co., 2031 N. Lincoln St., Burbank, Calif.

Sudbury Laboratory, South Sudbury, Mass.

RADAR

Bendix Aviation Corp., Pacific Div., 475 Fifth Ave., New York 17, N. Y.

Decca Radar Inc., 539 West 25th St., New York 1, N. Y.

Edo Corporation, College Point, L. I. N. Y.

Lavoe Laboratories, Inc., Morganville 16, N. J.

Radiomarine Products, a Division of RCA, 75 Varick St., New York 13, N. Y.

RADIO TELEPHONES

Applied Electronics Co., Inc., 1246 Folsom St., San Francisco, Calif.

Bludworth Marine, 92 Gold St., New York 38, N. Y.

Hudson American Corp., 25 West 43rd St., New York 18, N. Y.

Radiomarine Products, a Division of RCA, 75 Varick St., New York 13, N. Y.

RANGES—Galley

Harry C. Weiskittel Co., Inc., 4901 Pulaski Highway, Baltimore 24, Md.

REDUCTION GEARS

Auto Engine Works, Inc., 333 (A) North Hamline Ave., St. Paul 4, Minn.

Snow-Nabstedt Gear Corp., Welton St., Hamden, Conn.

Twin Disc Clutch Co., 1341 Racine St., Racine, Wis.

The Walter Machine Co., Inc., 84 Cambridge Ave., Jersey City 7, N. J.

Western Gear Corp., P. O. Box 182, Lynwood, Calif.

RUST PREVENTIVES

Sudbury Laboratory, South Sudbury, Mass.

SEAM COMPOUNDS

L. W. Ferdinand & Co., Inc., Mica Lane, Newton Lower Falls 62, Mass.

SHIPBUILDERS

Blount Marine Corp., Warren, Rhode Island.

Diesel Engine Sales Inc., St. Augustine, Fla.

Harvey F. Gamage, So. Bristol, Maine.

Gladding-Hearn Shipbuilding Corp., 1 Riverside Ave., Somerset, Mass.

Morehead City Shipbuilding Corp., Morehead City, N. C.

Frank L. Sample & Son, Inc., Boothbay Harbor, Me.

SILENCERS

The Maxim Silencer Co., 126 Homestead Ave., Hartford, Conn.

STARTING FLUID

Spray Products Corp., P. O. Box 584, Camden 1, N. J.

STEERING GEAR

The Edson Corp., 334 So. Water St., New Bedford, Mass.

Metal Marine Pilot, 342 Golden Gate Ave., Tacoma, Wash.

STERN BEARINGS

"Goodrich Cutless": Lucian Q. Moffitt, Inc., Akron 8, Ohio.

Byron Jackson Tools, Inc., Box 2493, Terminal Annex, Los Angeles 54, Calif.

TWINE

Brownell & Co., Inc., Moodus, Conn.

V-BELTS

Flexible Steel Lacing Co., 4683 Lexington St., Chicago 44, Ill.

VOLTAGE REGULATORS

Safety Industries, Inc., Box 904, New Haven 4, Conn.

WINCHES

Bodine & Dill (formerly Hettinger Engine Co.), Bridgeton, N. J.

Hancock Marine, 1567 No. Main St., Fall River, Mass.

Hathaway Machinery Co., Inc., New Bedford, Mass.

Stroudsburg Engine Works, 62 North 3rd St., Stroudsburg, Penn.

WIRE ROPE

American Steel & Wire Division, United States Steel, Rockefeller Bldg., 614 Superior Ave., Cleveland 13, Ohio.

John A. Roebling's Sons Co., Trenton 2, N. J.

Wickwire Spencer Steel Division of The Colorado Fuel & Iron Corp., Palmer, Mass.

FOREIGN BAILINGS

BRITISH PROCESSING FIRM has obtained a United States order for quick-frozen fish worth \$300,000. The company recently opened a new, modern fish-processing plant at Hull to cope with a flood of overseas orders. This plant cost \$420,000 to build, and is fully automatic and tiled throughout. At the end of every day it is steam-sterilized from top to bottom.

MEXICAN COOPERATIVES are eligible for loans to be used in purchasing fishing boats and gear. During 1957 about \$720,000 will be made available through National Cooperative Development Bank of Mexico for loans to fishery cooperatives. In addition, cooperatives will be permitted to borrow for first time from private banks.

The 147 Mexican fishery cooperatives, with 15,000 members, have exclusive right to fish for shrimp, abalone, lobsters, oysters, totoaba, cabrilla, and pismo clams.

NORWAY'S 1956 FISH CATCH set an all-time record, with close to 2.0 million tons being landed, compared with 1.6 million tons during 1955. Ex-vessel value increased from \$85.4 million in 1955 to \$96.8 million in 1956. Herring accounted for over half of total catch.

FRENCH SARDINE LANDINGS in 1956 were expected to amount to more than 40,000 metric tons. By November 13, 1956, a total of 38,250 tons had been recorded in Atlantic ports and 2,500 tons in Mediterranean ports. This broke the previous record, established in 1934.

TRAINING COURSES for new recruits to fishing industry in United Kingdom have been organized at Hull, Grimsby, Lowestoft, Plymouth, and in Scotland. Additional courses to enable those already in the industry to improve their positions also have been organized.

EXPLORATORY SHRIMPING off British Guiana coast is being carried out by a United States firm. The company's fleet of three fishing vessels and a mothership for processing and storing the catch is operating out of Georgetown. Although shrimp have been caught in many areas, catches so far have not been large enough for a profitable large-scale shrimp fishery.

NORWAY'S HERRING CATCH has been cut by nearly incessant winter storms, which have caused heavy losses for 28,000 Norwegians participating in the annual fisheries off the west coast. Landings up to February 8 totaled approximately 350,000 tons of mature herring. At the same time a year ago, the catch was over twice as big.

Index to Advertisers

Air Cruisers Div., Garrett Corp.	50
The American Brass Co.	35
American Marc Inc.	8
W. A. Augur, Inc.	51
Auto Engine Works, Inc.	48
Auto-Marine Engineers, Inc.	51
The Boston Metals Co.	54
Brownell & Co., Inc.	7
Marine Engine Division, Chrysler Corp.	56
Colorado Fuel & Iron Corp., Wickwire Spencer Steel Div.	2
Columbian Bronze Corp.	47
Columbian Rope Co.	1
The Coulter & McKenzie Machine Co.	51
Diesel Corp. of N. J.	54
The Dow Chemical Co.	55
Eldredge-McInnis, Inc.	54
The Enterprise Mfg. Co.	35
Exide Industrial Division, The Electric Storage Battery Co.	12
Fairbanks, Morse & Co.	11
The Federal Paint Co., Inc.	49
Gulf Oil Corp.	27-30
The Harris Co.	48
The Heminway & Bartlett Mfg. Co.	44
Ingersoll-Rand Co.	50
Lister-Blackstone, Inc.	38
Wm. M. McClain, Inc.	48
Michigan Wheel Co.	10
Lucian Q. Moffitt, Inc.	44
Morehead City Shipbuilding Corp.	43
R. Murphy Co.	48
O. Mustad & Son	47
Nordberg Gasoline Marine Engines	46
Norseman Marine	46
Northill Anchors	50
Osco Motors Corp.	48
Perkins-Milton Co., Inc.	43
Pfueger Fishing Tackle	35
Radiomarine Products, a Division of RCA	3
E. S. Ritchie & Sons Inc.	49
John A. Roebling's Sons Co.	45
Dwight S. Simpson & Associates	51
Sponge Products Div., B. F. Goodrich Co.	6
A. M. Starr Net Co.	39
Surette Storage Battery Co.	4
Westerbeke Fishing Gear Co.	54
Western Net Shop	54
Wilfrid O. White & Sons, Inc.	51
Wickwire Spencer Steel Div. of The Colorado Fuel & Iron Corp.	2

BOAT & GEAR MART

Classified Advertising Rates: \$1.00 per line, \$5.00 minimum charge. Count 9 words to a line. Closing date, 25th. National Fisherman, Goffstown, N. H.

FOR SALE

Cruisers, draggers, auxiliaries—all types and sizes. If you are in the market for anything in that line, please write us—no inquiry too small to merit attention. KNOX MARINE EXCHANGE, INC., CAMDEN, MAINE.

STEEL BOAT FOR SALE

A steel boat, 42 x 12, built by Marinette Ship Yard, at Marinette, Wis. Has a Buda Diesel engine, depth recorder, Crossley net lifter. Price \$6,000.00. For further information write William Lasanen, Big Traverse Bay, Lake Linden, Mich.

DRAGGER "VENTURE" FOR SALE

Western rig, 39 x 11 x 4, 225 Gray Diesel, Hathaway winch, new cable, copper sheathed bottom. Good condition. Price \$3500.00, for quick sale. Located Northport, L. I., N. Y. Call or write Clement J. Reseska, 525 Main St., Northport, N. Y. Telephone 3-2211M.

PARTS FOR SALE

K.N.A.—K.N.B. Superior heads, new in crates—Buda, Cummins and all Model G.M.C. parts, gaskets, etc. Pumps, injectors. Call or write New England Diesel Service, 537 East Third St., So. Boston, Mass. Tel. Andrew 8-1402.

FOR SALE

Two scallop trawlers, ex-WWII; subchaser 110' and 72' x 19' x 8'. Both perfect condition, all electronic gear, operating. Many marine engines 100 hp. to 1000 hp. Eveready Company, P. O. Box 638, Bridgeport, Conn. Tel. Edison 4-9471.

FOR SALE—REASONABLE—FISHING BOAT

Length 62', beam 18', draft 10'. Complete with two Lorans, RCA Radiomarine 35-watt radio, Raytheon "Fathometer" depth recorder, excellent condition. Boat powered with 171 Buda engine completely overhauled last September, with new Twin Disc clutch purchased last May. Lister Diesel 2½ kw. auxiliary generator, 2½ kw. Safety Car generator with carbon pile regulator and cut-out, driven off the main engine. Boat has complete dragging and scallop gear. Gear lists as 4 nets, 3 sets of doors, balls, rollers. Three scallop rakes ready to fish. Spare engine parts: 2 heads, 1 Ross heat exchanger, 1 starter, 1 carbon pile regulator and cutout, 1 Leece-Neville generator, 1 Columbian propeller, and Twin Disc clutch parts. Anyone interested call Provincetown, Mass. 886.

DRAGGER "VAGABOND" FOR SALE

Eastern type, built 1948, 64' long, 17' beam, 10' draft. Ices 60,000 lbs. fish, 265 hp. Hendy Diesel, Hathaway deck gear, Bendix depth finder, direction finder, Loran, radio-telephone. Ruggedly built. Boat completely overhauled. Reasonable. Harold B. Essington, 24 W. Park Ave., Pleasantville, New Jersey. Tel. 2133.

GOVERNMENT SURPLUS EQUIPMENT LIST

Buy surplus direct from Government at tremendous savings. Boats, motors, gear, machinery, power tools, truck, jeep, hundreds others. List \$1.00. Surplus Bulletin, Box 169NAE, East Hartford 8, Conn.

ENGINES AND BOAT FOR SALE

400 hp. (at 300 rpm.) Atlas Imperial 13 x 16 engine (2,000 hours), stored in heated building, complete in good order. New Murphy Diesel M.E.90, 4 cyl., 5¼ x 6½, 96 hp. at 1200 rpm. Twin Disc coupling 3 to 1. Also excellent dragger hull, 97 x 21 x 10.7. Fully equipped including

G. M. DIESEL MARINE ENGINES

Completely Rebuilt and Guaranteed

"6-71" with 1½ to 1 Twin Disc—\$2500. "4-71" with new 1½ to 1 Borg Warner—\$1975. 2 to 1 or 3 to 1 slightly higher.

DIESEL CORP. OF N. J.

1473-79 McCarter Highway, Newark 4, N. J.

Large stock of engines and parts
Humbolt 2-7881

ELDREDGE-McINNIS, INC.

NAVAL ARCHITECTS

MARINE ENGINEERS

Specializing in Fishing Vessel Design

131 State St., Boston 9, Mass.

Walter J. McInnis

Alan J. McInnis

"WESTERN JIB" TRAWLS

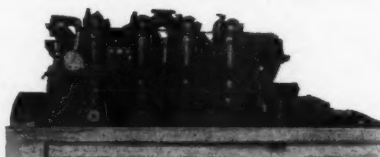
Patent Pending

WESTERN NET SHOP

"Speck" Harris

"Whistle" Rhodes

FREEMONT, TEXAS



UNUSED
DIESEL
ENGINE

Kahlenberg diesel engine—120 HP—10" bore—10½" stroke—4 cyl.—2 cycle. Direct reversible, with reverse and clutch. Has air starting. Engine is a complete installation consisting of 3-blade propeller, aux. air compressor, Kahlenberg air horn, air tanks, muffler, pilot house control, motor generator set, tools, spares.

THE BOSTON METALS COMPANY

313 E. Baltimore St., Baltimore 2, Md.
CURtis 7-5050

Hathaway winch, less main engine. Priced right. Rocky Bay Co., 75 Central St., Boston 9, Mass. Liberty 2-4366.

STARTERS AND ENGINES FOR SALE

Starters—surplus new 12-volt, RH, heavy duty. Fit G.M., Buda, Superior, Hercules Diesels, \$20 each, or \$15 each, 10 or more. G.M. 4 and 6-71 Diesels. Fairbanks-Morse 36A with 2:1, 6 cyl., 4¼" x 7", very good condition—\$800. Superior 4 cyl., MDB, 5" x 7", very good condition—\$800. Hercules DWXDS, 150 hp., 2:1, rebuilt—\$1300. Chryslers, Chris-Crafts, rebuilds. Helwege Marine Engine Co., 741 S. Ocean Ave., Freeport, N. Y. Telephone FR. 8-0583.

COMMERCIAL FISHING AND WORK BOATS

Many sizes and types, including Monterey purse seiners, tugs, barges, salmon and albacore trollers, ranging from \$1,000 upward; fishing gear, such as salmon power gurdies, stainless steel tuna hooks, Wood Freeman automatic pilots; trolling wire; Donald Woodward, Licensed Broker and Wholesale Marine Distributor, Moss Landing, Calif. Tel. Castroville Newton 3-2620. (Closed Sundays).

WESTERBEKE FISHING GEAR CO., INC.

Grimsby Trawls
Wesco Cod-end Protectors
Wire and Manila ropes

— Distributors —
Boston 10, Mass.
Also store and warehouse Gloucester, Mass.

Marine Hardware
Danforth Anchors
Paints — Fittings



67-foot "North Easter" insulated with Styrofoam

Experience shows Styrofoam* makes outstanding insulation

H. F. Sahlman, Sr., president of Sahlman Seafood Company operating 13 shrimp trawlers out of Fernandina Beach, Florida, speaks from 30 years in the fishing industry.

He says, "Our company has been using Styrofoam for several years, and we find it entirely satisfactory. Styrofoam is installed after a boat is built. On our boats," he says, "Styrofoam is applied directly to floors, ceilings and bulk-

heads of all fish and ice holds."

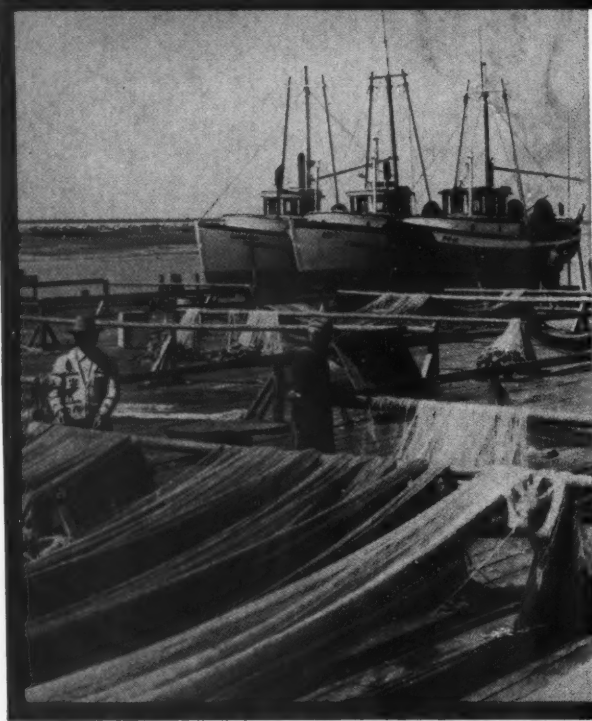
Cutting ice consumption by 30% is just one of the benefits of Styrofoam (a Dow plastic foam). Resistance to water absorption, rot and vermin, light weight and lifetime service without maintenance are other advantages.

For money-saving data, write THE DOW CHEMICAL COMPANY, Midland, Michigan—Plastics Sales Department PL1724K.

*Styrofoam is a registered trademark of The Dow Chemical Company.

YOU CAN DEPEND ON

DOW

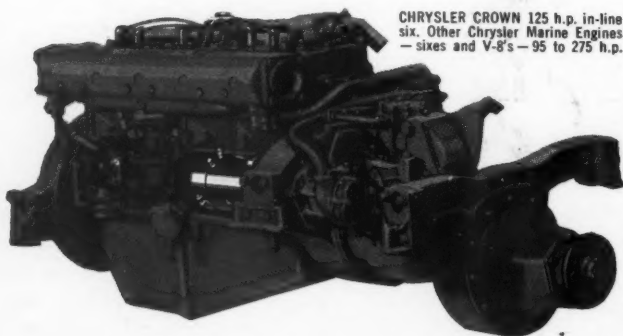


NELSON BROS. FISHERIES, LTD. wharf and nets with three Chrysler-powered gill net boats in the background.

**Vancouver, B. C.
Fisheries report:
more Chrysler
Marine Engines
in use than
all other makes
combined**

WHY the overwhelming preference for Chrysler Engines? Dependability is a big reason. Staying power is another. For example, some of the Chrysler Engines in these Vancouver, B. C. fishing fleets have been working under the roughest, most demanding conditions for as long as a dozen years — *without a major maintenance problem.* That's some performance record. Add all 'round economy, no-extra-cost features, fast service, rapid parts availability . . . and there's your answer.

For detailed information see your Chrysler Marine Engine Dealer or write **Dept. 3K, Marine Engine Division, Chrysler Corporation, Detroit 31, Michigan.**



CHRYSLER CROWN 125 h.p. in-line six. Other Chrysler Marine Engines — sixes and V-8's — 95 to 275 h.p.

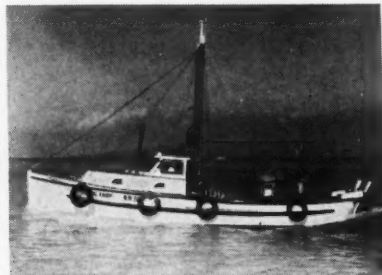
America's No. 1 Marine Engine

CHRYSLER

MARINE ENGINE DIVISION • CHRYSLER CORPORATION



"LADY-L" owned by John Robinson, operated for FRANCIS MILLERD & CO. LTD., powered by Chrysler Crown Engine.



LOYAL LADY owned by M. Matsumura, operated for BRITISH COLUMBIA PACKERS, LIMITED, powered by Chrysler Crown Engine.

